

# AMERICAN BEE JOURNAL

JULY

1911

## W. Z. Hutchinson, Late Editor of the "Bee-Keepers' Review"

An apicultural chieftain has fallen. He was one of the leaders not only in the actual work of the apiary for many years, but also in the literature of advanced bee-culture. He was a far-seeing prophet of the time when honey-production should be placed upon a firm business basis, and not conducted in connection with some other pursuit. He preached the gospel of "keeping more bees," and practiced what he preached. He was ever discovering the best methods of apiarian procedure, and describing them for the benefit of others through the Bee-Keepers' Review, which he founded in 1887, and of which he was editor and publisher from first to last. The Bee-Keepers' Review was W. Z. Hutchinson. No other man can wholly take his place as its editor and conductor. His peculiar and fascinating personality permeated its pages and general management so thoroughly that it was a publication unique and widely different from all others in its field.

Mr. Hutchinson was born in Orleans Co., N. Y., Feb. 17, 1851, and 4 years later his father moved to Genesee Co., Mich. "W. Z." was of a mechanical turn of mind, which he followed until 18 years of age, when he began to teach school in the winter-time. It was the custom in those days to "board around," and in that way he happened to find a bee-book, which opened his eyes to a new world. Following this "lead" he discovered a bee-keeper by the name of Simpson, who had an only daughter in whom Mr. Hutchinson became even more interested than he was in her father's bees. She later became Mrs. Hutchinson, and to-day is left with 3 daughters to mourn for the one they so much loved, and who departed this life May 30, 1911.

In a letter written to us by Mrs. Hutchinson, she speaks thus tenderly of her late husband:

FLINT, MICH., June 5, 1911.

MR. YORK:—Mr. Hutchinson kept up his courage until almost the last of his conscious days, as he was unconscious a day and a night before the end, and nearly so for 2 days before. Not more than a week before he said: "I have not done anything about the next Review, but guess I will let it go this month, and may be next." For he was trying so very much to get well, and thought it best to do all he could towards it. There were so many complications that appeared just as we felt encouraged to think he was gaining.

While he was in the hospital at Ann Arbor in the spring, and ever since that time, he sat up in his bed and kept the Review going, always with the expectation of getting well, and all of his work was planned with that end in view. A better man, I believe, never lived, nor a kinder husband or father. He looked, as he lay in his casket, as if he had never been ill, and it did seem so hard to have them take him away; but I feel that some day I shall see him again.

I was obliged to let my little grandson that has lived with us so long, go to his home in Detroit while Mr. Hutchinson was so ill. At the time of the funeral, little Bruce, being himself too ill to come, said he was going to die as soon as he could so he could see grandpa! This must tell how he loved him.

MRS. W. Z. HUTCHINSON.

We became acquainted with Mr. Hutchinson in November, 1886, while attending a meeting of the National Bee-Keepers' Association at Indianapolis, Ind., where we roomed together in the hotel. It was about 2 months after our own marriage, and Mr. Hutchinson being somewhat older, we had a delightful and confidential talk on topics uppermost in our minds at that time. He gave us some brotherly advice, and we became fast friends thereafter. Whenever he came to Chicago he would always call on us, and it was our pleasure to be in his home for a night when on our way to the National convention at Toronto, in 1895. Mr. Hutchinson accompanied us from his home to that



"He Taught Us To Keep More Bees"

meeting. We had a long and very pleasant journey together. (By the way, that was the last convention attended by Father Langstroth, and also Thomas G. Newman who preceded us as editor of the American Bee Journal.)

For something like 20 years Mr. Hutchinson, as editor of the Bee-Keepers' Review, Ernest R. Root, as editor of Gleanings in Bee Culture, and the writer as editor of the American Bee Journal, have been a trio of friends that have had the best interests of bee-keepers at heart, and have worked harmoniously together for their advancement. In the former days there was considerable unseemly strife among the inventors, dealers and writers in the American bee-keeping world, but in these latter days there have been peace

and quiet, and, we trust, progress and prosperity throughout the length and breadth of beedom. With perhaps only one or two exceptions during all the past 20 years, we three have been such close friends, and our aims have been so nearly parallel, that the sailing on the journalistic sea of apiculture has been exceptionally smooth, and there have been a steady on-going of the pursuit, and continued increase of the honey out-put.

Marvelous, also, has been the development of the manufacturing end of the business, as well as the improvement in every line, particularly that of the literature of bee-keeping. We may, perhaps, be pardoned for thus expressing ourselves, but we want to accord to our departed friend the larger share of credit for this later development and advancement. He was ever ferreting out the best and largest honey-producers, and inducing them to reveal the secrets of their success. In the later years of his life he not only kept up his publication to a high standard, but he even launched out into the practical work of the apiary, and hence his advice, "Keep more bees," was born of personal experience and faith in the pursuit. He was thus in a position to exemplify in actual practice what he advised on the printed page.

In the Bee-Keepers' Review for January, 1911, is an editorial paragraph written by Mr. Hutchinson, which shows him a prophet of inspiration, faith and hope for bee-keepers, and also suggests the kind of epitaph he hoped to deserve when he had passed from earth. The item is this:

### HAVE FAITH IN YOUR BUSINESS

I have a feeling of kind regard; in fact, I might almost say, affection, for bee-keepers. I like to see them succeed. I am doing all in my power to help them succeed. I wish to drive from their minds all doubts and fears, and hesitancy. I wish to inspire them with faith in their business, so that they will dare to go ahead and increase their business, and start an apiary here and another one there, and make money, so that they can ride out to their apiaries in an automobile. When I am dead and gone I wish to deserve the epitaph: "He taught us to keep more bees."

For a number of years Mr. Hutchinson was Secretary of the National Bee-Keepers' Association, and often had it not been for his ability to write shorthand in those earlier days, many of its annual proceedings would never have been preserved. He was also President of the Association for one year, and was always interested in its progress and up-building.

The bee-keepers of the Eastern United States recently assembled at the Massachusetts Agricultural College at Amherst, Mass. There they learned for the first time of the unexpected death of Mr. Hutchinson. After several of the bee-keepers had expressed their sympathy for Mrs. Hutchinson, and had spoken of the

(Concluded on page 213.)

# American Bee Journal



PUBLISHED MONTHLY BY  
**GEORGE W. YORK & COMPANY**  
 117 N. Jefferson Street, Chicago, Ill.

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2. To protect and defend its members in their lawful rights as to keeping bees.
3. To enforce laws against the adulteration of honey.

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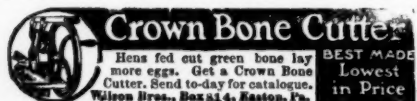
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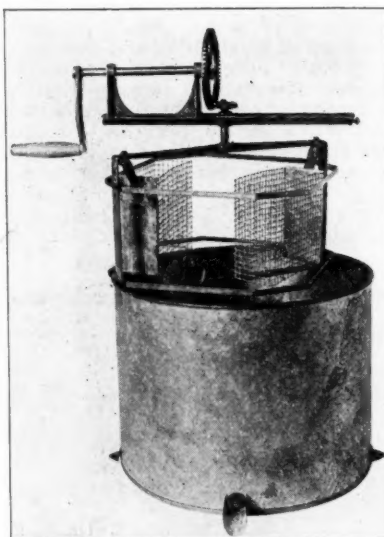
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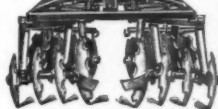
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DR. C. C. MILLER, Associate Editor.

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## EDITORIAL COMMENTS

### Non-Sitters and Non-Swarmers

In comparing bees with poultry, the editor of the Canadian Bee Journal was asked if, in the case of hens, egg-laying constitutes reproduction, why it does not in the case of bees. He calls attention to his previous statement, "It is only when queens are hatched and a swarm issues that *real* and *complete* reproduction takes place in the case of the honey-bee," and then says that the obvious answer "is that the hen's egg, if fertile, contains the germ which ensures the continuance of the race, but in the case of bees the continuance of the race is effected only through those eggs, that, as a result of the swarming instinct, are permitted by the bees to result in fully developed females."

Well, it does seem that there is some difference between bees and biddies, and yet it will hardly do to let that Canuck editor have his own way entirely. His idea seems to be that when a chick is hatched out of an egg there is "real and complete reproduction," but in the case of a bee's egg the reproduction is only seeming and partial, and that there is no real and complete reproduction unless there is swarming. Now, really, is not swarming colonization rather than reproduction? Suppose a colony continues year after year without swarming, each queen in succession being quietly superseded, would there be no reproduction? If a community of people should live for a century in the same place without sending out a colony, would you say there was no reproduction?

Getting back, however, to the real question, can we have such a thing as non-swarming bees? Can we not have non-swarming bees as well as non-sitting hens? We are told that such a thing as bees that never swarm has never been known. Well, do non-sitting hens never sit? Why, hardly ever. Then let us go for bees that will

hardly ever swarm. Some such bees are said to be already in existence, and if it is fair to call a hen that hardly ever sits a non-sitter, is it not just as fair to call a colony of bees that hardly ever swarms a non-swarmers?

Anyhow, we have the good-will of the editor of the Canadian Bee Journal, who says, "Our sympathies are entirely with those who desire to modify the swarming instinct of bees." That's better than some to whom the mention of non-swarming seems to be as a red rag to a bull, and who seem to think there is something sort of wicked about trying to breed out the swarming habit.

Any approximation toward non-swarming is a matter of the deepest interest to the practical bee-keeper, and interest in it has greatly increased during the past 40 years. It is not likely that that interest will grow less.

### That Million Dollars and Foul Brood

Over in England those who desire a foul-brood law are having a hard time of it through the opposition of some who see all sorts of bad things to follow the establishment of such a law. The objections seem a little amusing to those who are familiar with the working of such laws. One of the latest is that a million of dollars has been spent in America to fight the disease, and in spite of that it is spreading. Neither is it some ignoramus who says that, but a man who is very intelligent on other subjects, W. Woodley, one of the most prominent British writers. He says in the British Bee Journal:

"That million dollars seems a big sum to spend in a vain attempt to check disease, as we have it on good authority that foul brood is spreading at an alarming rate in the States of America."

It may not be a very wild guess that in some way Mr. Woodley has gotten

things tangled, and that the only ground he has for his statement is that Dr. Phillips estimates that the annual loss from foul brood is a million dollars, and it might be still more without any foul-brood laws.

### Securing the Illinois Foul-Brood Law

Last month we announced the passage of the foul-brood law which has been needed in Illinois for many years, and which, finally, through the efforts of a very few unselfish and devoted members of the Illinois State Bee-Keepers' Association, was secured during the session of the Legislature which adjourned in May. A copy of the law as it was passed and went into effect the first day of the present month, reads as follows:

#### A BILL

For an Act to prevent the introduction and spread in Illinois of foul brood among bees, providing for the appointment of a State Inspector of Apiaries and prescribing his powers and duties.

WHEREAS, the disease known as foul brood exists to a very considerable extent in various portions of this State, which, if left to itself, will soon exterminate the honey-bees; and,

WHEREAS, there is a great loss to the bee-keepers and fruit-growers of the State each year by the devastating ravages of foul brood;

SECTION 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: That the Governor shall appoint a State Inspector of Apiaries, who shall hold his office for the term of two years, and until his successor is appointed and qualified, and who may appoint one or more assistants, as needed, to carry on the inspection under his supervision. The Inspector of Apiaries shall receive for each day actually and necessarily spent in the performance of his duties the sum of four dollars, to be paid upon bills of particulars certified to as correct by the said State Inspector of Apiaries, and approved by the Governor.

SEC. 2. It shall be the duty of every person maintaining or keeping any colony or colonies of bees to keep the same free from the disease known as foul brood and from other contagious and infectious diseases among bees. All bee-hives, bee-fixtures or appurtenances where foul brood or other contagious or infectious diseases among bees exists, are hereby declared to be nuisances to be abated as hereinafter prescribed. If the inspector of apiaries shall have reason to believe that any apiary is infected by foul brood or other contagious disease, he shall have the power to inspect, or cause to be inspected, from time to time, such apiary, and for the purpose of such inspection he, or his assistants, are authorized during rea-

# American Bee Journal

sonable business hours to enter into or upon any farm or premises, or other building or place used for the purpose of propagating or nurturing bees. If said inspector of apiaries, or his assistants, shall find by inspection that any person, firm or corporation is maintaining a nuisance as described in this section, he shall notify in writing the owner or occupant of the premises containing the nuisance so disclosed of the fact that such nuisance exists. He shall include in such notice a statement of the conditions constituting such nuisance, and order that the same be abated within a specific time and a direction, written or printed, pointing out the methods which shall be taken to abate the same. Such notice and order may be served personally or by depositing the same in the post-office properly stamped, addressed to the owner or occupant of the land or premises upon which such nuisance exists, and the direction for treatment may consist of a printed circular, bulletin or report of the Inspector of Apiaries, or an extract from same.

If the person so notified shall refuse or fail to abate said nuisance in the manner and in the time prescribed in said notice, the Inspector of Apiaries may cause such nuisance to be abated, and he shall certify to the owner or person in charge of the premises the cost of the abatement, and if not paid to him within sixty days thereafter the same may be recovered, together with the costs of action, before any court in the State having competent jurisdiction.

In case notice and order served as aforesaid shall direct that any bees, hives, bee-fixtures or appurtenances shall be destroyed and the owner of such bees, hives, bee-fixtures or appurtenances shall consider himself aggrieved by said order, he shall have the privilege of appealing within three days of the receipt of the notice to the county court of the county in which such property is situated. The appeal shall be made in like manner as appeals are taken to the county court from judgments of justices of the peace. Written notice of said appeal served by mail upon the Inspector of Apiaries shall operate to stay all proceedings until the decision of the county court, which may, after investigating the matter, reverse, modify or affirm the order of the Inspector of Apiaries. Such decision shall then become the order of the Inspector of Apiaries, who shall serve the same as herebefore set forth, and shall fix a time within which such decision must be carried out.

Sec. 3. The Inspector of Apiaries shall, on or before the second Monday in December of each calendar year, make a report to the Governor and also to the Illinois State Bee-Keepers' Association, stating the number of apiaries visited, the number of those diseased and treated, the number of colonies of bees destroyed and the expense incurred in the performance of his duties.

Sec. 4. Any owner of a diseased apiary or appliances taken therefrom, who shall sell, barter or give away any such apiary, appliance, queens or bees from such apiary, expose other bees to the danger of contracting such disease, or refuse to allow the Inspector of Apiaries to inspect such apiary, or appliances, shall be fined not less than \$50 nor more than \$100.

For something like 6 years the Illinois State Bee-Keepers' Association has been endeavoring to induce the Illinois Legislature to pass this much-needed law, for the purpose of eradicating the disease of foul brood among bees in this State. At almost every session of the Legislature it developed that there were one or two enemies in the bee-keepers' camp, that were sending letters against the proposed law to members of the Legislature. We have in our possession one that was sent out not only during the recent session of the Illinois Legislature, but also during the session 4 years before, and also 2 years before, about the only difference being, we believe, that the words in italics in the second paragraph of the letter were crossed out, when mailing it the past winter, which would indicate that it was the same letter sent 2 and 4 years ago, with that one exception. We don't know why the names of the A. I. Root Co. and J. Q. Smith were crossed off this

year when mailing the letter, unless it is that Mr. Smith had died within the past 2 years, and we understand the Root Co. threatened to make it pretty warm for those who were sending out this letter if it were not discontinued. But here is a copy of the letter as it was sent to one of the members of the Legislature last February:

EMERSON, ILL., Feb. 23, 1911.

To the Honorable Chairman and Members of the Appropriation Committee, State Senate, Springfield, Ill.

GENTLEMEN:—Under the proposed Foul Brood law, an inspector can come into my bee yard and destroy as many hives of bees as he sees proper, or he can give me to understand it indirectly. If I do not make him a little private donation he will proceed to do me a great injury, and I can not prevent him from so doing. If I try to protect my property he can have me arrested and fined under the proposed law.

The prime leaders in this proposed law are such men as C. P. Dadant, a large dealer in bee-hives and supplies, the A. I. Root Company of Medina, Ohio, and J. Q. Smith, a State Inspector of Foul Brood.

Foul Brood has existed as long as man has been keeping bees. It has been in my neighborhood for many years, yet there are more bees kept around me to-day than ever before. The law is for the purpose of giving manufacturers a chance to sell more hives and some men a job at the expense of the State, as inspectors.

Any up-to-date beekeeper can take care of Foul Brood without any help from the State. They say they have the beekeepers back of them. There are at present about two hundred members in the Illinois Beekeepers' Association. Of these two hundred, three-fourths are honorary members—commission merchants, honey dealers, bee-hive manufacturers, their agents and their help.

Foul brood comes and goes like any other epidemic, such as hog cholera and chicken cholera. Who would think of paying a man to go around and look after every old woman's chickens? or to every farmer who has a few pigs that got sick? If such a law goes into effect I want pay for my bees the same as the State gives for destroying other property. I want five dollars for each and every hive of bees an inspector destroys for me. I have made my living by keeping bees for years and I claim I know a little of what I am talking about. Foul Brood will wear out ten times faster than any inspector can get rid of it.

The following will show to what extremes such laws can be carried: In one state they have made a law that a person can keep bees in only certain kinds of hives. If the state does not make a law to pay the expenses of the Foul Brood inspectors we will not hear anything more about Foul Brood laws.

Very truly yours,

W. H. H. STEWART.

In a letter from Mr. Jas. A. Stone, Secretary of the Illinois State Bee-Keepers' Association, he has this to say regarding the foregoing letter:

EDITOR YORK:—This same letter came to the Chairman of the Senate Committee on Agriculture 4 years ago, and when our Legislative Committee had been heard before the same, the chairman (Senator Dunlap) said, "Gentlemen of the Committee, before action is taken on this bill [the foul brood bill], I have a letter I wish to read to the Committee." When the Committee had adjourned, our committee asked as to the substance of the letter, which was quoted to us, and our president, Mr. Dadant, guessed the author (J. C. Wheeler), so then we were permitted to read the letter, which was in substance this same letter.

One week later, when this letter was to have been read in the Committee, we had informed Dr. Miller, Mr. York, and others, of the condition, and they so flooded the Committee with letters, that when we went back the next Tuesday to defend our interests before the Committee, Senator Dunlap said, "I can not call the Committee to-day—so many are absent—but you need give yourself no anxiety; the letter is not going to be read, and we will report your bill out favorably." That was the end of our trouble in the Senate.

Two years ago this letter in substance came before the House Appropriation Committee, and it was at so late a date when we appeared to speak for our bill, that we were not apprised of the letter till too late to in-

fluence the Committee, because the chairman had read the letter to the Committee and it decided them against us.

We accused J. C. Wheeler of writing the letter, for we recognized it as the same in substance as his former letter. But the chairman said no. We said that no well-informed bee-keeper would write that letter. We answered that we would know by the names if they were bee-keepers, so the chairman read the signed names (about a dozen), and among them was the name Stewart, and if Wheeler's name was there he was hidden toward the last of the list—and was from the first the author of the letter, and has been making cat's-paws of the other fellows, so far as they were willing to be used. One of these letters came to my hand, signed by W. H. H. Stewart, addressed to Henry Stewart, asking him to send copies of it to his representatives, which he (Henry Stewart) refused to do.

I also received a letter from one bee-man who was honest enough to acknowledge his sentiment—or ignorance, as you might call it—for we used his letter before the Legislative Committee to help our cause. He said:

"I will not circulate the petition you sent me for a foul brood law, for I think a little foul brood in my neighborhood cleans out the bees, and gives me the whole territory; but I do think a foul brood law would keep diseased bees from coming in from Indiana."

After our committee (Pres. Dadant and Messrs. York, Baxter, Kildow, Pyles, Moore, and myself) had been heard the past winter, we never heard any more of these letters—we had so thoroughly put them in the Ananias list; and, as I said in another letter, when our Bill had been delayed, the same chairman on whom these fellows had tried their hand, "daddied" and pushed a Bill that makes their foul-broody bees worthless and condemned; so they will now have to suffer on the same gallows they have caused to be erected, as did Haman of old.

JAS. A. STONE.

It seems, however, that another letter was mailed by the same bee-keeper to a member of the Legislature, as follows:

EMERSON, ILL., Feb. 18, 1911.

I just heard of a man in Indiana who got himself appointed for bees; the first thing he did was to go around among his neighbors and killed a lot of bees, that he might have the field to himself. This shows how the proposed foul brood law works.

W. H. H. STEWART.

Upon receiving the foregoing brief letter, we sent a copy of it to Hon. Benjamin W. Douglass, who is the State Entomologist for Indiana, and has charge of the bee-inspection work for that State. The following is his reply:

INDIANAPOLIS, IND., Feb. 27, 1911.

GEORGE W. YORK,

American Bee Journal, Chicago, Ill.

Dear Sir:—I have your letter of the 25th and note your quotation from a letter received by a member of your Legislature.

The statement attributed to the Indiana bee-inspector is absolutely false from start to finish. I believe that I recognize the source of the information in question, and without going into the details of the matter, I can assure you that the report is utterly without foundation, and is a reflection upon serious, conscientious work. No bee-keeper of any repute is opposed to laws for the control of foul brood. We have only one or two old-timers who offered any opposition to the work of the Department. These men are all of the backwoods type of obstructionists who are against anything that happens to be different from the methods of their ancestors. The recent bee-keepers' convention in Indianapolis was attended by many of the most prominent men in the State, and the convention unanimously endorsed the Indiana Foul Brood law.

In Indiana we are extremely interested in the passage of a good foul brood law in your State for several reasons. In the first place, it is difficult to control foul brood on the borders of Indiana as long as infected material is exposed just over the State line. One of the worst districts is located in the northwest corner of the State, and I believe that much of the foul brood in this section has been brought there from the immediate neighborhood of Chicago. You can see, therefore, why we are especially interested in securing foul brood laws in the States bordering Indiana.

Respectfully,

BENJAMIN W. DOUGLASS,  
State Entomologist.



We don't know that much comment from us is necessary on the foregoing letters, as they speak for themselves, unless it be to say that three Illinois organizations of bee-keepers—the "State," "Chicago-Northwestern," and the "Eastern Illinois"—were practically a unit in asking for the enactment of laws similar to those of other States.

Now, we have no objections whatever to honest and open opposition to the passage of any proposed laws, but we do object, and most strenuously, to deception and misrepresentation—in fact, absolute falsehoods—in order to thwart the honorable efforts of men like Messrs. C. P. Dadant, Jas. A. Stone, E. J. Baxter, A. L. Kildow, I. E. Pyles, Chas. Becker, W. B. Moore, and other honest members of the Illinois Association, who have labored so unselfishly and for the best interests of all the bee-keepers of Illinois, in securing the passage of the much-needed foul-brood law. But it may be that the foolish objections of a few so-called bee-keepers finally helped to turn the tide in favor of the passage of the laws, for it was very easy to show the committees of the Legislature the falsehoods contained in the foregoing letters; and, of course, when they understood it, and also the animus back of such letters, they naturally would feel like standing up for the right, and giving the bee-keepers of Illinois practically all they asked for.

There was appropriated for the enforcement of the foul brood law \$1500 per annum, and \$1000 per annum for the use of the Illinois State Bee-Keepers' Association. The total appropriation asked for was \$3000, but all proposed appropriations were cut down in order that every worthy object should receive at least a fair proportion of the amount called for in various bills.

One would think that it was sufficient for Illinois to have her Lorimer, but we regret to say that she also seems to have a few bee-keepers who may properly be included in the same class of unworthies, but perhaps in a little different manner, though just as reprehensible as is the much-advertised Lorimer.

#### Shallow Frames for Extracting

In the Bee-Keepers' Review, Harry Lathrop makes a point in favor of shallow frames for extracting that is well worth considering. He says:

They make it easier to avoid throwing out some unripe honey along with the ripe. Place a set of deep frames on a hive, and the bees will keep a strip of cells open along the bottom for the purpose of placing in them green nectar. If you extract these combs, some of this unripe honey will be mixed with the ripe, which is a detriment more or less pronounced. If in the place of one deep super you had used 2 shallow ones, the upper one would be filled entirely with ripe honey, and the unripe would all be in the lower one. There are times, of course, when the full-depth combs would do just as well, but at these times 2 shallow supers are always as good as one deep one.

**Bee-Keepers' Congress in Italy.**—The Fifth International Congress of Apiculture will be held at Turin, Italy, Sept. 10 to 12, 1911. Bee-keepers from all parts of the world are invited to take part in this Congress, and an invitation is extended to honey-producers and bee-supply manufacturers to take part in an exhibition held in conjunction with the Congress.

## MISCELLANEOUS NEWS ITEMS

**Dr. Miller's 80th Birthday.**—As indicated by the front cover page of the American Bee Journal last month, all of our readers are aware that Dr. C. C. Miller, the associate editor of the American Bee Journal, completed his 80th year June 10, 1911. It was our pleasure to call on Dr. Miller, at Marengo, the evening of that date. We found him well, and as happy as ever. In reply to our question as to how it felt to be 80 years old, he smiled, and simply said: "I don't know; I haven't

ing for the production of anything along the honey line. But he was hoping that a change for the better in nectar-secretion might soon set in, and there yet be a good crop of honey harvested for 1911.

We are pleased to be permitted to present herewith Dr. Miller's latest picture, which was taken a few days before his 80th birthday. We had expected to use it last month, but the original photograph did not arrive at this office in time. After all, there is not much difference between the present picture and the one that appeared last month, although the latter was taken several years ago.

We count it one of the greatest privileges of our life to have been permitted to know Dr. Miller so intimately for a quarter of a century. His help and his influence in connection with the American Bee Journal can never be measured. Even to-day we believe he is the best known and most prolific writer on bee-keeping in the world. We hope that he may be spared yet many years to bless not only those in his own home and intimate friends, but all who read his cheering, inspiring words on the printed pages of the American Bee Journal. His place will not be easily filled when the time comes that he is called upon to lay down the work of his earth-life and take up that of the Eternal.

We only wish that bee-keepers everywhere knew Dr. Miller as we do. We would not say what we are now saying, nor what we have said so many times heretofore, were it not for the fact that Dr. Miller is beyond the "spoiling age." There be some who save up the flowers to place on the casket of their best-beloved friend, but why not bestow some of them while the friend is here, and can appreciate them? Such flowers are worth more given during life, than if saved until after our friends have passed away.

And so let us all unite in the hope that Dr. Miller's abundance of earthly years may be extended far in the future, and that all the remaining time may be filled with even happier days than he has enjoyed thus far.



DR. C. C. MILLER AT 80 YEARS.

been 80 long enough yet to say." The fact is that Dr. Miller is not the kind that grows old. He may be 80, or 90, or 100, and yet his heart will be as youthful and happy as ever. He is a man who lives always in the future. He evidently comes of a happy, hopeful race, and whether his years be few or many, his daily life is not affected thereby.

The Doctor has now nearly 120 colonies of bees in his home apiary. He discontinued the out-apiaries several years ago. He is a comb-honey producer exclusively, as most of our readers know; but the prospects on June 10, in his locality, were not encourag-

**The National at Minneapolis.**—As we have announced before, the next meeting of the National Bee-Keepers' Association will be held at Minneapolis, Minn., Aug. 30th and 31st—next month.

The Minnesota Bee-Keepers' Association is taking a great interest in this meeting, and have already begun to advertise it and to work for a large attendance. The Secretary of that Association, Mr. C. A. Palmer, writes us that through the courtesy of the Minneapolis Commercial Club, those in attendance at the convention will be given a trolley ride to points of interest in and around the Twin Cities. They thought it would be well to take the ride on Friday, the day following

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the regular convention. It should take 4 or 5 hours, or longer. This matter has been referred to Secretary Tyrrell. The Commercial Club has prepared a very neat folder containing suggestions for visitors to Minneapolis. Anybody may secure a copy of this folder if the request is sent to the Minneapolis Commercial Club.

There are less than 2 months until the meeting of the National. In the meantime, no doubt, every bee-keeper who can be present will make his plans accordingly. As we have before mentioned in these columns, it should be one of the most important meetings of the National Association that has been held in many years. There are a number of very urgent matters to come before it for decision, looking toward advancement along several lines, which should prove of great interest to beekeepers everywhere.

**Death of Mr. J. M. Null.**—We learned on June 7th, that Mr. J. M. Null, the husband of Mrs. Mary E. Null, of Miami, Mo., passed away Jan. 22, 1911. Mrs. Null contracted pneumonia, and a day or two later Mr. Null also was taken with it. It was expected that neither would survive, but Mrs. Null recovered. She is very well known to a great many of our readers, for in years gone by she has contributed occasionally to our columns. Mrs. Null is a practical bee-keeper, and has made a success of the work. No doubt we shall hear from her again in the future, as she may have time to record some of her later experiences with bees. All of our readers will join us in extending heartfelt sympathy to Mrs. Null in her bereavement.

**The Kansas State Fair** will be held at Topeka, Sept. 11 to 15, 1911. A very attractive list of cash and other premiums is offered, and a copy can be had by any bee-keeper who desires it by addressing the Superintendent of the Bee and Honey Department, Mr. O. A. Keene, of Oakland, Kan.

**"Bees"** is the title of Farmers' Bulletin No. 447, which has just been issued by the United States Department of Agriculture. It was prepared by Dr. E. F. Phillips, In Charge of Bee-Culture. It is a slightly altered edition of Farmers' Bulletin No. 397, with the addition of a little matter in the text, and a few illustrations. This bulletin (No. 447) may be obtained by addressing the Secretary of Agriculture, Washington, D. C.

In the letter of transmittal occurs the following paragraph:

"In the preparation of this paper, the aim has been to give briefly such information as is needed by persons engaged in the keeping of bees, and to answer inquiries, such as are frequently received from correspondents of the Department. No attempt has been made to include discussions of bee-anatomy, honey-plants, or the more special manipulations sometimes practiced, such as queen-rearing. The discussion of apparatus is necessarily brief."

Farmers' Bulletin No. 447 is a pamphlet of 48 pages, and just what every beginner in bee-keeping should have. On the last 2 pages of the pamphlet appears a list of all the publications of

the Department of Agriculture on bee-keeping, up to and including April 1, 1911.

**Bee-Inspector's Report in German.**—We have received two copies of the 14th Annual Report of the State Inspector of Apiaries for Wisconsin, one of which is printed in the German language. Practically all readers of bee-papers know that N. E. France, of Platteville, Wis., is the Inspector of Apiaries for Wisconsin. Any bee-keeper residing in that State can have a copy of either report on application to Mr. France. A copy of the German report will be sent to any one outside of Wisconsin for 5 cents.

**The Bee-Keepers' Review** is to be continued by Mr. E. B. Tyrrell, the Secretary of the National Bee-Keepers' Association. At the earnest solicitation of Mrs. Hutchinson, he has arranged to take up its publication. Owing to the death of Mr. Hutchinson, it will be necessary to issue a double number for June and July. Mr. Tyrrell will endeavor to conduct the Review along the same lines as it has been running. We have known Mr. Tyrrell personally for a number of years, and he, no doubt, will prove a worthy successor to Mr. Hutchinson, as he has a wide acquaintance with bee-keepers, considerable experience as a bee-keeper, and is overflowing with enthusiasm and new ideas along the line of honey-production, and its better and more profitable marketing. Among our large circle of bee-keeping acquaintances, we can think of no one else who would be more likely to make a success of the Bee-Keepers' Review than Mr. Tyrrell. Surely, all will join us in wishing him the prosperity he so richly deserves.

**Death of Wm. Stolley.**—Mr. Wm. Stolley, of Grand Island, Nebr., who was well known to a large number of our readers, passed away May 17, 1911. Only a short time ago we announced the celebration of his 80th birthday, in which many of the people of Grand Island united to do him honor. He had spent over half of his life there. He was born in Germany April 6, 1831, and came to America in 1849, locating with a number of others of his German home at Davenport, Iowa. He was one of the early pioneers of Nebraska, and was instrumental in its development. Besides his wife, Mr. Stolley leaves 8 children to mourn his departure.

Mr. Stolley had been a bee-keeper for many years, and was an interested reader and supporter of the American Bee Journal, to which he made a practice of sending the name of a new subscriber every year. We had the pleasure of meeting him at several conventions of the National Bee-Keepers' Association, and while he took no active part therein, he, no doubt, was one of the leaders in the bee-keeping industry in his part of the country.

And thus one by one the veterans of the pursuit of bee-culture are leaving us. They have done their work well, and those who follow should find the pathway much easier on account of

the good work done by their faithful predecessors. The foundations laid by the early bee-keepers are safe and sure. The rising generation can build upon them with ever-increasing confidence and assurance of success. The present owes much to those who 50 years ago were compelled to grope their way in apicultural darkness, but who, through untiring efforts and devotion, succeeded in placing bee-culture among the most satisfying and profitable of the minor agricultural industries of the world.

**The National Association** of bee-keepers now numbers in membership a few over 4500. Why not make it an even 5000 by the time of the Minneapolis convention, Aug. 30th and 31st? This could easily be done if only a few of those who should become members will send their \$1.00 dues to General Manager N. E. France, Platteville, Wis.; or, if more convenient, send to the office of the American Bee Journal, when we will forward it to Mr. France, and he will mail receipt. Next month we expect to be able to announce the full program for the convention, and also particulars as to hotel accommodations, etc. The thing to do now, by all who think they can attend, is to begin to get ready for a great meeting. We hope to see the best attended of any convention the National has ever held. Then it will doubtless be the best in every other respect.

**The New Passenger Terminal** of the Chicago & Northwestern Railroad Company, in Chicago, is the most modern railroad station in the world. It is located on Madison Street, between Canal and Clinton Streets, occupying 4 city blocks, extending north between Madison, Washington, Randolph and Lake Streets. It covers a space of 10 acres, and has a capacity for handling a quarter of a million people daily, entering or departing from the city on the hundreds of through trains which place Chicago in touch with the West and Northwest. It is occupied exclusively by the Chicago & Northwestern railroad, and represents the latest step in perfection of travel comfort. There is nothing like it west of New York city. The total cost of this 8th wonder of the West was \$24,000,000.

All the conveniences of a first-class hotel are found here, with the one exception of sleeping apartments. Ladies and children will find perfectly arranged apartments at their disposal, including private rest-room, tea-room, baths and retiring-rooms. The invalid is provided for with perfect hospital facilities. There are dressing-rooms, sanitary barber-shops, baths, rest-rooms and waiting-rooms for men. There are 35 windows where tickets can be purchased. A garage is provided for motor-cars. The dining service is unsurpassed by the best metropolitan cafes. Another innovation is a drug-store where all possible travel accessories may be obtained at reasonable prices.

There are 40 clocks in the building, all regulated by a master clock. The air of the station is changed every 20 minutes by a modern ventilating system, and the drinking water is con-



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stantly kept at a temperature of 52 degrees; this can be had both through faucets and the bubbling system.

The main waiting-room is 84 feet from the floor to the top of the ceiling, the latter being self-supporting, and the only one of its kind in the world. There are 250 electric lights in this splendid waiting-room.

This passenger terminal of the Chicago & Northwestern railway is located in the midst of Chicago's greatest activities, and is reached direct by no less than 4 great thoroughfares of traffic leading to and from the adjacent hotels and business houses. The American Bee Journal is just one block directly west of this magnificent structure, so that our office can be reached within one minute or less time after stepping off the train. We hope that any of our readers who come to Chicago will be sure to see this wonderful passenger terminal of one of the greatest railroads on earth. There are a number of other attractions connected with it that we can not describe for want of space. In fact, it must all be seen in order to be fully appreciated. It will doubtless be one of the greatest wonders of this city for years to come, as likely no other Chicago railroad system will attempt the erection of such a building, elevated tracks, etc., as the Chicago & Northwestern now, after about 4 years' work, has erected and put into actual service—a service that is certainly delightful to all who can avail themselves of it. It is our pleasure, as well as privilege, to enter this terminal and depart from it every business day of the week. Come to Chicago and see it, and also call at the office of the American Bee Journal, where we will be pleased to welcome you. (See illustration on last page.)

## Pennsylvania Summer Bee Meeting.

This will be held in the High School Building at Reynoldsville, Pa., July 11 and 12, 1911. After the usual preliminaries, consisting of reports, welcome address, etc., the following topics will be treated:

- "Handling Bees for Practical Work," by Geo. H. Rea.
- "Handling Bees for Exhibition," by E. R. Root.
- "Handling Hives and Apparatus," by I. F. Miller.
- "Equipment for the Amateur," by Prof. H. A. Surface.
- "Late Developments in Apiculture," (illustrated) by E. R. Root.
- "Queen-Rearing," by Penn G. Snyder.
- "Improving Stock," by S. P. Christian and J. R. Rambo.
- "Controlling Swarming when Working for Comb Honey," by Chas. N. Greene.
- "Extracted Honey," by Harold Horner.
- "Necessity and Methods of Apiary Inspection," by Geo. H. Rea.
- "Building Up Colonies for the Clover Harvest," by Wm. A. Selser.
- "Treating Foul Brood," by Geo. H. Rea and Wm. A. Selser.
- "Shook-Swarming," by E. R. Root.
- "Transferring from Box-Hives and Trees," by Prof. H. A. Surface and H. C. Klinger.

The work of every afternoon will be in an apiary. Special music will help to enliven the program. Exhibits of honey and bee-supplies will be made. Excellent hotel accommodations have been secured. Rooms may be had with or without boarding. Good meals are served at restaurants. Bee-keepers' headquarters will be at Frank's Tavern, where special rates have been secured

at \$1.50 per day. For any further desired information address, H. C. Klinger, Liverpool, Pa.

**Illinois 10th Annual Report.**—The Report contains (227 pages) a shorthand report of not only the State Association's last meeting, but also of the Chicago-Northwestern and the National for 1910. It was ready for the mail just at the date of the passage of our foul brood law, and we had it held till the Governor would sign the law, and had it placed in the Report as a pasteur, so that all our members could know what our law is. The law we first applied for is also there, but we have explained elsewhere why they differ. Last year we had 300 cloth-bound copies of our Report, and had just a few left; this year we ordered the same number, and later ordered 20 more, and still are about to run out. Those who send in their fees from this time on for the year may have to take a paper-covered Report, but they will be down for a

cloth-bound copy for next year. Those not members can have a paper-covered Report for 27 cents, by sending order to the Secretary.

Now that the Illinois State Beekeepers' Association, with the help of the Chicago-Northwestern, have succeeded in securing a foul brood law for Illinois, it becomes the duty of every bee-keeper in the State to help one of these associations at least by their support. One dollar membership fee sent to Sec. Jas. A. Stone, Rt. 4, Springfield, Ill., gives membership for one year in the State Association, in the National, and a copy of the Report. One dollar and 50 cents sent to Sec. Louis C. Dadant, Hamilton, Ill., pays a yearly membership fee in the two above-named societies, and in the Chicago-Northwestern as well, besides a copy of the Report, as above. Each member joining after March 1st gets a paper-covered Report, and the next year a cloth-bound one.

JAS. A. STONE, Sec.  
Rt. 4, Springfield, Ill.

## BEE-KEEPING FOR WOMEN

Conducted by MISS EMMA M. WILSON, Marengo, Ill.

### A Sister "Government Apiarist"

One of the sisters seems to be playing a leading part in far-off South Africa. H. F. Bengier, Hon. Sec. South African Bee-Keepers' Association, says in the British Bee Journal:

In a quiet way, Miss M. D. Sillar, the Government apiarist, has been doing good work in the Orange Free State, and the result of this must react in the future in the establishment of apiculture on a firm basis as an important rural industry.

### "Tartared Teeth"—A Warning

MY DEAR MISS WILSON:—Permit me as a practicing dentist to take radical exception to Mrs. M. E. Pruitt's recommendation, in your department, for "Tartared (!) Teeth," page 169.

A very few applications of muriatic acid, even in far more dilute form than stated, will be the ruin of 99 percent of teeth so treated; any combination of sugar or honey with an acid, only increases the injury done.

While it is my belief, based on more than 30 years' observation, that the pure natural acids of ripe fruits have but comparatively little effect upon the teeth, taken with due moderation, it is a matter of positive fact that all mineral acids attack tooth substance most viciously and instantly upon contact. I say the "pure natural acids, of ripe fruits"—the addition of any sweet changes the action of such acids, or any acids in contact with material composed largely of lime, as are the teeth, making the action far more energetic.

Let me advise that no person should try to remove "tartar" deposits on his own teeth, nor allow any one to try to do it for him excepting a dentist, who will do such work thoroughly and harmlessly by mechanical means solely.

Hoboken, N. J.

Dr. Cheney is entitled to very warm thanks for calling attention to this very unfortunate error, which Mrs. Pruitt will most certainly be glad to have corrected. According to what Dr. Cheney says, the acid in question will be effective in attacking tartar on the teeth;

but this seems to be one of the cases in which "a little learning is a dangerous thing." We are not merely to learn that the acid will affect the tartar, but we are to learn that the acid will at the same time attack the tooth itself. But anything further than Dr. Cheney's vigorous letter is hardly needed to emphasize the danger.

It will probably be news to many a housekeeper that the addition of any sweet to the "pure natural acids of ripe fruits" is not a good thing for the teeth. The fact is that with many the habit of adding sweet to fruit is carried to such an extent as to be bad for both teeth and digestion. Most fruits are really at their best without any sugar at all, if the fruit be maturely ripened, provided the taste has not been badly educated.

### "How You Can Earn Money With Bees"

Under this caption appears an article in the Delineator, written by Samuel Armstrong Hamilton, urging bee-keeping for women. It contains some good things, and enough of the other kind to relieve it of monotony.

Here are some things to which all bee-keepers would not agree: "Langstroth movable dovetailed hives..... used by all up-to-date bee-keepers." "The 10-frame hive should be preferred, as being better for comb honey." "The making of extracted honey is not profitable unless there be an apiary of 50 hives or more, owing to the expensive machinery required and the additional help needed." A section is "A small frame of wood, 4x5 inches." (What would he call the usual 4x4x4?)

Evidently Mr. Hamilton has no extravagant idea of woman's ability when

# American Bee Journal

he says: "A woman can run an apiary of 25 hives without assistance, except when putting them into the cellar for wintering, if run for comb honey." That hints that 25 run for extracted honey would be beyond her. What *would* he think of Miss Mathilde Candler who counts her colonies by the hundred, doing nearly all the work alone?

Swarm management is somewhat original. When the swarm issues, set the old hive at least 30 feet away, and put the swarm in its place. In the evening of the same day return the old hive to the old stand, and set the swarm on a new stand some distance away, with a marker in front. *At this time the old hive has all the nurse-bees and a new queen.* Now is it locality or management that allows no nurse-bees to go with the swarm, and that gives the mother colony a new queen a week before the usual time?

Still, Mr. Hamilton *might* have had more things wrong than he has.

## Bee-Keeping for Women

In her salutatory Miss Ethel Robson, Conductor of the Woman's Department in the Canadian Bee Journal, makes an unusually strong and convincing plea for bee-keeping for women. Pity that it could not be read by the thousands who are not interested in bee-keeping and yet who might be, instead of being read by the few already interested. Yet its reading will stimulate this latter few, so the article is here given entire:

We hear a great deal about keeping the boys on the farm and about giving the boys a chance. This is all right, but how often do we hear about keeping the girls on the farm and giving the girls a chance? Yet year by year the girls are leaving the farm, mainly because they desire a chance for some sort of economic independence. But if country life is to be made attractive and interesting, it is just as necessary that the girls be kept on the farm as the boys. Of the girls who go for school teachers we can make no complaint—the children must be taught, and as neither the responsibility nor the emolument of teaching the rising generation makes much appeal to the young man, the girls will have to fill the need.

But by no means all the girls who leave the farms become school teachers; many more go into offices and shops and factories. They do not go in the hope of making their fortunes, or becoming the heads of big business concerns, or if they do, few realize their ambitions; the best they can look forward to is a comfortable livelihood, with the possibility of marriage, for which their work by no means tends to fit them. Yet for many of these girls it is imperative that they make a living; perhaps the family finances can not be stretched sufficiently far to go around, or it may be that a brother has married and they have been crowded out, or possibly it is a wholesome desire to exist by their own exertions; and with a few—Heaven prosper their efforts!—it is the quenchless ambition to spend themselves in the service of humanity. The tendency of our educational system seems to have been to educate the girls away from the country. It does not direct their attention to the farm, either for their pleasure or for the more practical matter of making a living in their own resources.

How many, I wonder, looking back on their school days can recall a single effort made to fit them for a life on the farm either in the way of filling them with pride in the farmer's place in the community or teaching them that nothing can exceed the simple pleasure in growing and living things. With some shame I confess that it is not very long ago that I looked upon the discussion of the prices of butter and eggs and the best methods of raising turkeys as exceedingly petty, as, indeed, it can be, if viewed from a narrow, personal standard, but when viewed as a part of the great scheme of existence it

takes another meaning. And so our girls, when face to face with the vital problem of making a living rarely look towards the farm, instead they gravitate to the towns to swell the already over-full ranks of the wage-earners, and drain the country of the fresh young life which it so greatly needs.

And now, oh, dear women readers of the Canadian Bee Journal, all this preamble is only preparatory to an expression of our firm belief that bee-keeping offers a most remunerative and healthful and interesting employment to women in the country; the great wonder is that they haven't turned their attention to it largely long ago. It is

the object of this department to stimulate the interest of the women of Canada in this most promising industry that many may be induced to enter it on their own account. We do not propose to put men out of business; indeed, it will be necessary for long enough to have the enterprise and experience of the men, if the honey trade is to prosper; but there are at present thousands of tons of nectar going to waste yearly in the fields of Canada, which we women may have for the taking, if we only have the initiative and perseverance to make our own. So, come along, let us see how much of it we can gather!

## CANADIAN



## BEEDOM~

Conducted by J. L. BYER, Mt. Joy, Ontario.

### Hot Weather and Honey-Dearth

In the May number of the American Bee Journal I mentioned the fact of the season being later than usual. How Nature can change things in a hurry when she takes a notion!

About 10 days ago rains fell, and then great heat followed, and for the past 6 days the heat was simply torrid. Vegetation has come forth with a rush, and indications are now that the clover will actually be in bloom earlier than last year. Dandelions are out in full bloom in the forenoons, but will not last long with the present heat. Tonight (May 22) the fronts of the hives are all covered with great clusters of bees like in July instead of May, and, where supers are not on, some swarms will likely issue. Apple-blossoms are also out, but in the afternoons, when the dandelions are closed, the bees will try to rob if they are handled, showing plainly that the bloom is devoid of nectar. Whether the great heat we are having is a factor or not in bringing about this condition I know not, but I do know that the absence of nectar makes it mighty unpleasant for doing any work in the apiary in the afternoons.

### Ontario Apiary Inspectors for 1911

J. S. Schrank, Port Elgin.  
D. Chalmers, Poole.  
John Artley, Blantyre.  
W. A. Chrysler, Chatham.  
John Newton, Thamesford.  
James Armstrong, Cheapside.  
Arthur Adamson, Erindale.  
Henry Johnson, Craighurst.  
Homer Burk, Highland Creek.  
W. Scott, Wooler.  
Alex. Dickson, Lancaster.  
J. B. Checkley, Linden Bank.  
Herbert Doherty, Lang Bay.  
Morley Pettit, Guelph.  
R. Fretz, O. A. C., Guelph.  
G. L. Jarvis, O. A. C., Guelph.  
F. E. Millen, O. A. C., Guelph.

In looking over the foregoing list of inspectors for Ontario for the present season, it will be noticed that three students of the Agricultural College from Guelph are among the number. This is a step in the right direction, as it is hard to get qualified men to go out on inspection work, as most of them are quite heavily interested in their own behalf in so far as looking after bees is concerned. Indeed, there is no question but that many of the men acting are doing so at a personal sacrifice,

and if it is possible to get students trained for the work, certainly the movement will be approved by most of the bee-keepers.

It may be argued that students are not qualified well enough to act as inspectors, but I believe we may have implicit confidence in Mr. Pettit, who has charge of the work to a great extent, and may trust to his judgment in the sending out of any men on this important branch of the Government service. I understand that the students named on the list have been with thoroughly competent men during the past few weeks, and are being drilled in the practical side of the work they will be called upon to perform. Of course, they have had the theoretical part of the training imparted to them through the winter months at the College. As the young men in question are contemplating taking up bee-keeping as a specialty, the training they will receive while "on the road" should prove of great value to them in the future when they enter their chosen vocation for life.

### Carniolan Bees and Swarming

A friend in Sunnyside, Calif., writes me in reference to the Carniolan bees, asking me to explain in the American Bee Journal how I control swarming with this race of bees. Judging from what he says, he has never kept any of these bees, and has been influenced by the many reports of the excessive swarming of Carniolans.

Now, I do not deny but what they will swarm more than Italians, but I do insist that this race has been maligned unduly on this point, as with a large hive the swarming problem is easily controlled. And right here let me say that one reason they swarm sooner than some other bees, is because they are so much more populous early in the season, and if allowed to become crowded in the brood-chamber, naturally they seek relief from these unnatural conditions.

I use the Jumbo-size hive, and it is a rare thing indeed when I do not have to give supers to the colonies in these hives by the time fruit-bloom comes on. No matter how cold the weather is previous to this period, if the colony has abundance of honey to draw on, the condition named will always be in



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evidence when the fruit-blooming period comes along. By giving lots of super-room, I have had no trouble with swarming even in years of heavy yields.

In 1909 I averaged, for the 3 apiaries, a little over 150 pounds per colony, and if I remember correctly, I did not have over a dozen swarms, all told. Some of these were caused by supersedure, and if all colonies had young queens, I am convinced the swarming would have been about nil. Of course, the bees in the yards in question were not all Carniolans, yet this blood predominated, and the pure Carniolans swarmed no more than any others.

Of course, this fact must be considered when thinking of keeping Carniolans. A hive as small as the 8-frame Langstroth will be treated as a joke by these bees unless a second story is given real early in the season. Then, again, a single story of this size would not give satisfaction when the queen

would be forced down at the commencement of the honey-flow.

The friend who asked me to speak of these bees says that in California the early-breeding instinct would be of great value, and from what I know of these bees I have not the slightest doubt about the matter.

He also asks as to how Carniolans would act if treated on the "shook swarm" plan if run for comb honey; but on this point I can give no opinion as I have had no experience on that line.

Right here let me say that I hold no brief for any breeder of Carniolan bees, but, frankly, I have often wondered at the exaggerated ideas advanced about the bad traits of these bees, from the pens of men well known in the calling.

In conclusion, I would advise my friend to try Carniolans on a small scale, and then decide on their merits, after a fair trial.

our prices, which are generally higher than most of the other producers, and it was no trouble at all to be flooded with more orders than we could fill. This must show, conclusively, if anything at all, that the higher price was satisfactory as far as the market was concerned. But there has not been a single year in which we did not hear from some of our customers that other bee-keepers were offering their honey at from one-half to a cent per pound lower than our prices, and that they did not understand why it was, except that there must be an overproduction of honey. In many cases we have been asked to meet this lower price, but when we have such a large demand as we have had for the last few years, we do not deem it advisable to lower our prices, and the result has been that our customers buy our honey just the same, stating that in doing so they know just what they are going to get.

However, it is to be regretted that the blame for the low prices of honey rests with the bee-keepers themselves, and it is hoped that the time is not far off when each and every one of them will make a stronger effort in the direction of aiding in raising the price of honey just so much, and we are confident, beyond the least doubt, that the result would soon show.

There is no question but that the prices of other commodities that belong in the same class as honey are higher in price, but why should this be? We know that the united effort of the concerns that put other things out to the trade "hang together more than the bee-keepers do, and agree on a certain price for their goods." It is very seldom that one of these concerns rushes in with prices below the market when there is no reason for it. But this must be said of a lot of bee-keepers who, we know, have done this very thing year after year.

Conditions here in the South are such that we are able to sell all our honey at a good price without fearing that we will not be able to sell it at all. Of course, we do not mean that we should put the price up too high—higher than the market can stand to pay for it and handle it at a reasonably good profit; but we do not believe in offering our honey at a less price than the market is willing to pay, either. A half a cent to one cent a pound makes a great deal of difference to a producer who has from 50,000 to 100,000 pounds of honey to sell in a single year, and it is worth going after if that is possible without being unreasonable.

## "Bee-Keepers' Guide"

This book on bees is also known as the "Manual of the Apiary." It is instructive, interesting, and both practical and scientific. On the anatomy and physiology of the bee it is more complete than any other standard American bee-book. Also the part on honey-producing plants is exceptionally fine. Every bee-keeper should have it in his library. It has 544 pages, and 295 illustrations. Bound in cloth. Price, post-paid, \$1.20; or with a year's subscription to the American Bee Journal—both for \$1.90. Send all orders to the office of the American Bee Journal.

## SOUTHERN



## BEEDOM

Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

### A Southern Honey Price-List

One of our readers has asked us the following:

"Please give us an outline for a price-list of honey as you are using it. It may seem easy enough for the ones who are well versed in business to make out a price-list, but for us who know little about it this is quite a puzzle."

In reply to this query we think we can answer to the best advantage by simply giving a copy of our price-lists that we have used for a number of years, and which have served our purpose very well. Of course, such lists can be arranged to suit different requirements. For instance, it will be noticed that section honey is not quoted on our list, since we do not produce it in Texas, and hence it is found on hardly any of the many price-lists that are sent out by our bee-keepers. Instead of the bulk comb honey prices this space can be used for section-honey prices. However, I am sure that the time will come when many price-lists will have all three kinds of honey appear on them; that is to say, that extracted, section and bulk comb honey will be offered by some producers, and therefore the price of each will appear on the list. Since we produce only the two kinds of honey—extracted and bulk comb—we give our own list here:

#### EXTRACTED HONEY.

60-lb. cans with 1½-in. screw caps, 2 in case, per lb.....	9c
12-lb. friction-top pails, 10 in case, per lb.....	9½c
6-lb. friction-top pails, 10 in case, per lb.....	10c
3-lb. friction-top pails, 20 in case, per lb.....	10½c

#### COMB HONEY.

60-lb. cans with 8-in. screw caps, 2 in case, per lb.....	11c
12-lb. friction-top pails, 10 in case, per lb.....	11½c

6-lb. friction-top pails, 10 in case, per lb.....	12c
3-lb. friction-top pails, 20 in case, per lb.....	12½c

### Low Honey Prices—Who is to Blame?

Time and again the question of the present prices of honey as compared with other like products is up for discussion. In comparison with the many other things that come in the same class as honey does, it does seem as if the prices of honey are too low. The question then follows, "Who is to blame?"

If we compare the prices of honey prevailing in the Northern markets throughout the year, we find that, unlike the way it used to be in times past, the prices are about the same as our prices here in the South. Of course, we have only the extracted honey to compare, as section honey is very rarely produced in the South, while bulk comb honey—strictly a Southern product—is not found as a general product on the markets of the North.

We wish to go on record as having striven for many years to bring up the price of honey, and we must claim at least some success for our efforts. A great difficulty that we have experienced, however, is that of having other producers quote their honey at a much lower price than the general market would pay. This is aggravating, to say the least. It seems nonsensical, when we know that we can get from a half cent to one cent per pound more for all of the honey that we can possibly produce, just as easily as to get the lower price. This is especially so when the seasons are not so favorable and the crops not so large.

Since we have studied this matter for many years, we know whereof we speak. Every year we have quoted

## FAR WESTERN BEE-KEEPING

Conducted by WESLEY FOSTER, Boulder, Colo.

### Colorado Honey Crop Prospects

The outlook is good for honey in Colorado. The Western Slope reports conditions favorable; bees were swarming in the Arkansas valley around the first of May, and except in places where water is scarce the crop will probably be good. Grasshoppers, drouth and loss of bees the past winter will limit the crop in northern Colorado, but what bees are left are doing well wherever there is water for the alfalfa. The grasshoppers are not increasing the way they seemed to be, and I doubt whether they will be a general pest this summer.

Idaho is late on account of the cold, damp spring, but alfalfa began yielding there early in June. The bees in northern Colorado began working on the alfalfa the last of May—the earliest I ever saw it.

Sweet clover is coming on fine, and though June so far has been very dry, a good rain has fallen with prospect of more, and things will now grow some during the next few weeks.

White clover is coming in thicker every year, and the bees are thick on it. I am not sure but what we will soon have to give white clover a place along side of alfalfa and sweet clover.

Horsemint and many other dry-plains flowers are furnishing honey, and while this honey is not so high in quality, I am glad to see come all that will.

Some day I hope to know all the wild flowers that yield pollen and nectar, but that will be quite a job, I can assure you. Our wild flowers are such beautiful and interesting specimens that when I may spend some time with them is looked forward to with delight. I have several pictures of them already. When one has photographed a flower it is not soon forgotten—the focusing of the camera and making the exposure give one time to observe the structure in every detail. And if you can catch the bees on the blossoms it is all the more interesting.

### Our New Apiary Law

The bill drawn by the Legislative committee of the Colorado State Bee-Keepers' Association has passed both the House and the Senate, and has been signed by the Governor. This new law takes effect 90 days after the Legislature adjourned, or about Aug. 4th. The law provides for the establishment of a division of apiary investigation and inspection under the State Entomologist, Prof. C. P. Gillette, of the Colorado Agricultural College. An appropriation of \$2500 per year is made to carry out this work, and we now have a division of bee-investigations as well as an inspection law that has given effective results in other States.

Thanks for invaluable aid are due to Senator Casaday, of Boulder, who introduced the bill in the Senate, and to Representative Skinner, of Montrose, who introduced the bill in the House. Dr. Phillips and Editor Root also gave many valuable suggestions and helped in every way within their powers. The American Bee Journal, Gleanings in Bee Culture, and Ranch and Range, all threw open their columns to the cause and urged the bee-men to write their legislators, which they did in fine fashion.

The State Association sent out over 300 letters to bee-keepers, and every legislator was also written in regard to the bill. The expense was borne by the Association, and the treasury is bankrupt; but we will replenish it as we have done before.

The following is a copy of the new law:

#### A BILL

For an Act to establish a Division of Apiary Inspection and Investigation under the State Entomologist, etc.

*Be it enacted by the General Assembly of the State of Colorado:*

SECTION 1.—The State Entomologist is hereby authorized to conduct a division of apiary investigation and of inspection of bee-diseases directly or through a deputy, who is experienced in apiculture. The investigation to cover the introduction of nectar-producing plants, the agencies influencing the secretion of nectar in plants, and such other subjects as may advance bee-culture in Colorado. The inspection shall extend to all parts of the State where bees are kept, for the prevention, eradication or control of bee-diseases.

SEC. 2.—Every bee-keeper or other person who shall be aware of the existence of foul brood or any other infectious or contagious disease of bees either in his own apiary or elsewhere in the State, shall immediately notify the State Entomologist or his deputy in charge of apiculture of the existence of such disease.

SEC. 3.—The State Entomologist or his deputy in charge of apiculture shall, when notified in writing by the owner of an apiary or by any bee-keeper, examine all reported apiaries, and if any contagious disease is present, examine all others in the same locality not reported, and ascertain whether or not any disease known as American foul brood, European foul brood, or any other disease which is infectious or contagious in its nature, and injurious to honey-bees in their egg, larval, pupal, or adult stages, exists in such apiaries; and if satisfied of existence of any such disease, he shall give the owner or caretaker of the diseased apiaries full written or printed instructions how to treat such cases as in his judgment seem best, and state a time in which his instructions shall be carried out.

SEC. 4.—The State Entomologist or his deputy in charge of apiculture shall visit all diseased apiaries a second time, after ten days, and if need be burn all colonies of bees that he may find not cured of such disease, and all honey, comb and appliances which would spread disease without recompense to the owner, lessee or agent thereof.

SEC. 5.—If the owner or caretaker of an apiary, honey or appliances wherein disease exists shall sell, barter, or give away, or move, or cause to be moved without a written permit from the State Entomologist or his deputy in charge of apiculture, any diseased bees (be they queens or workers), colonies, honey or appliances, or expose other bees to the danger of such disease, said owner or caretaker shall, on conviction thereof be fined not less than Fifty Dollars nor more than One Hundred Dollars, or im-

prisoned not less than one month, nor more than two months, or both.

SEC. 6.—It shall be unlawful to move bees from localities where disease is known to exist without a permit from the State Entomologist or his deputy in charge of apiculture; For violation of this act said owner or caretaker shall, on conviction thereof be fined not less than Fifty Dollars nor more than One Hundred Dollars.

SEC. 7.—Common carriers shall not accept bees for shipment without a permit from the State Entomologist or his deputy in charge of apiculture; For violation of this act said common carrier shall on conviction thereof be fined not less than Fifty Dollars nor more than One Hundred Dollars.

SEC. 8.—For the enforcement of the provisions of this act the State Entomologist, his deputy or his duly authorized assistants shall have access, ingress or egress to all apiaries or places where bees are kept; and any person or persons who shall resist, impede or hinder in any way the inspection of apiaries under the provisions of this act shall, on conviction thereof, be fined not less than Fifty Dollars nor more than One Hundred Dollars, or imprisoned not less than one month nor more than two months, or both.

SEC. 9.—After inspecting infected hives or fixtures, or handling diseased bees, the inspector or his assistant shall, before leaving the premises or proceeding to any other apiary, thoroughly disinfect any portion of his person and clothing, and any tools or appliances used by him which have come in contact with infected material, and shall see that any assistant or assistants with him have likewise thoroughly disinfected their persons and clothing and any tools and implements used by them.

SEC. 10.—The sum of \$2500 per annum is hereby appropriated to be expended for this work under the direction of the State Entomologist, to pay the salary of the deputy in charge of apiculture, the necessary expense in traveling, printing blanks and circulars, and in otherwise carrying out the provisions of this act.

The State Auditor is hereby authorized to draw his warrants upon the State Treasurer for the sum herein appropriated upon the presentation of proper vouchers, and the Treasurer shall pay the same out of any funds in the State Treasury not otherwise appropriated.

SEC. 11.—All acts or parts of acts in conflict with this act are hereby repealed.

SEC. 12.—In the opinion of the General Assembly an emergency exists and this act shall take effect from and after its passage.

### Alexander Plan of Increase

The Alexander plan of making increase is working fine here this year. Colonies that were covering but one or 2 combs the first of May have built up and been divided on the Alexander plan, and each colony is now (June 15) ready for and working in the extracting chambers. This will not work every year, but fruit-bloom was very profuse and yielded honey for several weeks, and the bees just "spread themselves." The bees spread their nest and took care of the brood as fast as the queens could lay the eggs.

### Souvenir Bee Postal Cards

We have 4 Souvenir Postal Cards of interest to bee-keepers. No. 1 is a Teddy Bear card, with stanza of poetry, a straw bee-hive, a jar and section of honey, etc. It is quite sentimental. No. 2 has the words and music of the song, "The Bee-Keeper's Lullaby;" No. 3, the words and music of "Buckwheat Cakes and Honey;" and No. 4, the words and music of "The Humming of the Bees." We send these cards, postpaid, as follows: 4 cards for 10 cents, 10 cards for 20 cents; or 10 cards with the American Bee Journal one year for \$1.10. Send all orders to the office of the American Bee Journal.



## BEE-KEEPING



## IN DIXIE~

Conducted by J. J. WILDER, Cordele, Ga.

## Reports from Dixie

## From the white tupelo-gum region:

My bees almost had the nectar in their mouths when the awfully cool and windy weather set in, which continued during the flow, and only a half crop, or less, was harvested.  
S. S. ALDERMAN.  
Wewahitchka, Fla.

## From the chinquapin region:

Our flow is good. Many of my colonies are storing in their third and fourth supers.  
Fort White, Fla. R. W. HERLONG.

## From the saw palmetto region:

The heavy gale set in with the honey-flow, and has lasted up to the present, and less than a half crop will be gathered.  
Canaveral, Fla. H. L. HOLMES.

## From the poplar region:

The weather is very cool, and the honey-plant is nearly at its height of bloom, and I fear a very light crop will be the result, for the bees have not done much storing in the supers.  
Bogart, Ga. JOHN W. CASH.

## From the ty-ty region:

The freeze in February killed the larger percent of ty-ty, and a large crop can not be expected.  
Bluff Springs, Fla. L. S. GILMORE.

## From the gallberry region:

The honey-flow is the best for years, and a good crop has been gathered, except in locations where the forest and waste land have been burned close. It has been a very dry winter and spring, and almost all low land could have been burned off, and in some localities it was, which, of course, will make the flow light with some bee-keepers.  
Pinehurst, Ga. B. I. LEAPTROT.

## Apiary Work for July

The most unpleasant thought about outlining apiary work is that very few will try, or at least make an effort, to follow in some way the work outlined. Well, it is just this important: If we turn loose our bees as soon as the spring harvest is over, we will have but very little or no summer and fall harvest, and heavy losses during the winter and spring. On the other hand, if we do continue apiary work, we may expect a good honey harvest to follow, and no winter losses. I have tried it both ways, and I am more eager to prepare my bees for summer and fall harvest than spring, because weather conditions are most sure to be more favorable. Since I have resorted to continued apiary work, I have gone from no summer harvest to where it is about equal to the spring harvest.

I used to fear failures, but I don't now, because I have so much time to do apiary work and harvest honey.

The greatest thing we can do towards harvesting a crop of honey is to have all colonies headed with good queens and plenty of bees, and the brood departments well filled with brood in all stages of development, so as to maintain the strength of the working force throughout the entire flow. If this holds good for the spring flow, why

not for the other flows which are to follow? But this is a little more difficult to do in apiaries where there are old queens, or less prolific ones, for by this time they have done the best work for the season, but young queens will readily occupy the comb in the brood-chamber, if it is not filled with honey, and keep the colonies highly populated right on throughout the entire season, harvesting all the honey possible from each flow, and go into winter quarters in the best possible shape; and for this reason I advocate and urge the bee-keepers to requeen right after the spring flow all colonies that may have old queens, or queens over 2 years old. If this has been done, such colonies can be supered at the approach of each honey-flow, and as the flow from cotton is now on this can be done.

At this season of the year it is folly to set supers over colonies of bees without knowing the contents of the colonies, for the bees will enter them and soil the interior fixtures, and may be gnaw away the comb foundation, or do but little work in them, because the working force is too weak; but if the colonies are strong and active, they will fill the super at once with bees, and begin comb-building and storing honey.

If colonies are not ready for the supers they should be left off, and made ready by giving them prolific queens or plenty of room.

## Working Comb Foundation

It is very difficult for bees to work comb foundation at this time of the year, owing to the high temperature which makes it very flimsy. This can be overcome by dipping it in cool water as it is used, and shaking the water off.

## Chunk Honey Packed in Barrels

Inquiries have come in recently from honey-dealers relative to shipments of chunk honey packed in barrels and kegs, saying they have been receiving shipments of chunk honey thus packed, and saved considerable transportation charges; and that they repacked it into smaller vessels for the trade. They say if it is packed very closely and carefully, and covered well with extracted honey, that it always arrives in good condition, or the comb unbroken.

I would not know how to pack honey thus, unless it would be to loosen the top hoops and remove the heads of the barrels and kegs, and after well filled with comb, put the heads back, and tighten up the hoops, and finish filling them with extracted honey through a small hole in the heads, then seal up.

The trade is more and more calling for chunk honey, and if it can be thus supplied, it would certainly mean a boon to chunk-honey production.

## Frame or Comb Manipulation

The average bee-keeper in Dixie does not handle or examine the combs of his bees. He just buys hives for the bees and puts the swarms in them, and leaves them to thrive or die. And the nearest they come to "culturing" their bees is removing the honey they may have stored. A very small percent of the extensive bee-keepers ever examine the brood-chamber of their hives as much as twice during a season, and only every now and then can one be found who resorts to comb manipulation in a wholesale way throughout the entire season. And it is a wonder that bee-keepers succeed as well as they do here.

But is it worth while, or does it pay to do it? Many times, yes; for profit in the business can only be measured by the amount of proper or prudent comb manipulation the bees have received. The beginner should examine the comb of his bees by the time a swarm has built a set of combs in the brood-chamber. It's the best and quickest way to learn bee-keeping. Just the mere examining of combs will suggest the exchanging of a comb of one colony for that of another; that the bounty of one may supply the need of another.

I know that if comb manipulation is resorted to in a wholesale way throughout each season, much labor is involved, for it is a long, tedious process, but it is interesting, and I don't mind "to dig" so long as I see good results following me up as I go from hive to hive, and from apiary to apiary.

Frame or comb manipulation covers the broader field of bee-culture, and I know of nothing that would add more to the profit side of our industry than a set-up system of comb manipulation by every bee-keeper.

## Excessive Use of Smoke on Bees

I have often seen bee-keepers smoke their bees so severely while manipulating frames that the greater part of the bees would boil out at the entrance and cluster under the alighting-board, or around on the sides of the hives, and there remain for several hours before they would all go back into the hive, and from thence to the field, and the general work under full headway again. And this they do, seemingly, not aware of the fact that they have given the bees a great back-set in their work. This is, indeed, poor policy at a time when there is no nectar to be gathered, and, when there is, it is done at the expense of the honey crop. If the nights are cool the bees will not stir much in the early part of the morning, or late in the afternoon; then if they are thus molested or hindered during the warm hours of the day, for several days during a honey-flow, it will mean considerable loss. I would rather use smoke moderately, and endure a few stings, than to sustain the loss.

"Bees and Honey"—the book by Thos. G. Newman—is almost out of print, but we have a few copies left (cloth bound) at 30 cents each. Do you want one? Address the office of the American Bee Journal.

## CONTRIBUTED



## ARTICLES

### Improvement in Honey-Bees

BY ADRIAN GETAZ.

The discussion between Mr. Byer and Dr. C. C. Miller is very interesting. As usual, the Doctor is on the right side of the fence—and his opponent on the other.

In the first place, the assertion that everything has been created just so and can not be changed, and, if it could be changed, dire results would necessarily follow, is not correct. It would be if the works of Nature were inflexible, and arranged so as to dovetail rigidly one into the other. But they are not so. They possess an "elasticity," if that term can be used, that permit them to vary and adjust themselves to various conditions. The changes that have occurred in plants and animals through the geological periods; the difference between the same species or strains according to the climate under which they grow; the still greater changes created in the domesticated plants and animals, furnish ample proof of it.

The size of bees is not, or rather has not always been, as uniform as Mr. Byer seems to think. Turn to Cheshire's works and you will see that the weight of bees from different strains varies from 14 to 20 grains for 10 bees. The old European works state clearly that there were some difference of size between the different strains of black bees, and that the Italians were notably larger than the common run of blacks. Some time ago a strain of dark bees was accidentally found in France that were decidedly larger than the usual races. It may be remembered that a Mr. Murdock, of Florida, succeeded in producing bees quite a bit larger than the common stock.

Nevertheless, these differences have practically disappeared. This is due to the general use of comb foundation of uniform size. It is evident that a bee can not grow any larger than the size of the cell in which she is reared. And if she were, she could not get in it later on to do the work.

Some attempts have been made to increase the size of bees by increasing the size of the cells. A too-large size of cell given at once confuses the bees. A moderate increase has usually failed to give larger bees at once. This could be expected. A larger cell is necessary, of course, but a selection of the queens producing the largest workers is also indispensable to obtain a permanent increase of size. In the experiments made years ago in France, by Dr. Drory, on giving only drone-comb foundation to the bees, it was found that the majority of queens laid only drone-eggs, but there were exceptions. A case occurred in Germany with a queen that lived 4 years, and during all that time never laid a drone-egg, in spite of the fact that several times none but drone-

comb was given her, to see what would be the result.

I think there would be a gain in increasing the size of bees. A larger bee would likely fly faster, at least to some extent, for the reason that the resistance of the air does not increase as rapidly as the volume, and consequently the strength of the moving object. Furthermore, a larger bee, possessing a larger tongue, might suck the nectar out of the flowers more rapidly. One point is certain, there would be a saving of time going to and coming from the field, for it would take a less number of trips to bring in the same quantity of nectar.

With a larger size there would be also an increase in the length of the tongue. The measurements made a few years ago show unmistakably that even in bees of the same size there is quite a difference in the length of the tongue. With our present sources of honey the matter is not very important, but it will not be always so. In course of time the woods, wild flowers, and even the pastures filled with white clover, will almost disappear, while the cultivation of the red clover will increase considerably. This is not merely a wild prophecy, but is what has already happened in the best cultivated parts of Europe, and will eventually happen here as well. When that time comes a strain of bees capable to work regularly on red clover will be invaluable.

Will the swarming disposition ever be eliminated? Well, "I don't know." Considering what has been done with other domesticated animals, and the fact that there is a wide difference between the different strains of bees in regard to that disposition, one is justified in saying at once, "Yes, certainly."

But there are two other things connected with the swarming disposition. One is the instinct of building queen-cells or rearing queens, and the other the animosity between queens. One of the two, or both, would disappear with the swarming disposition. Left to themselves, the bees losing these dispositions, would speedily die out. In the hands of the apiarist, it might be different. He could always control the number of queens, and he might rear the queens by giving the necessary eggs or young larvæ to another strain of bees just like we give Leghorn eggs to a hen of another race to hatch. But we haven't got there yet.

Knoxville, Tenn.

### How to Rear Our Queen-Bees

BY G. M. DOOLITTLE.

I think every one will be ready to admit that as good queens can be reared by the bees under the swarming impulse as by any other plan. This was the way under which queens were reared mostly during all the centuries

which have passed, down to about half a century ago, and the way by which the bees survived all the perils through which they went, so that when they came to our day they were apparently as hardy and vigorous as they were in the early morn of that day when the Creator of all things pronounced them very good. And the only reason that queens by natural swarming do not now obtain, as in the past, is that queen-bees have, at the present time, become an article of commerce, therefore queens by natural-swarming cells can not keep up with the demand. For this reason some quicker methods of rearing thousands to where tens were once reared has been brought about.

And from this has come the desire to rear queens out of season to meet the demand for queens early in the spring, and a cheaper class late in the fall; those desiring to do this often failing to comprehend that good queens can not be reared in the spring until enough young bees have emerged from their cells to make quite a comfortable showing in the hive; neither can good queens be reared in the fall after brood-rearing has mainly ceased.

It needs plenty of young bees and a good supply of brood in the hive to rear first-class queens. Without this, no one should undertake to rear queens at all. With this as a foundation, we can supply the lack of pasturage from the fields by feeding. Then, if we can find any colony which shows by its building queen-cells outside of the swarming season that the bees are about to supersede their queen, we can rear as good queens from such a colony, during the time that the old queen lives, as can be reared under the swarming impulse. If the colony thus trying to supersede their queen does not have your best breeding queen with them, and you do not care to rear a large number of cells at that time, all that need be done is to get a piece of comb from the best queen's colony, the same having larvæ in it from 36 to 48 hours old, when you can do what is known as "grafting the queen-cells," which is simply transferring larvæ over from this piece of comb into the royal jelly in the queen-cells the bees have started, after first removing the larvæ that you found floating in this royal jelly. In this way the bees, all unconsciously, go on and perfect a queen from the substituted larva, the same as they would have perfected their own, the same being better cared for, if possible, as it is cradled in a cell rich with royal jelly the instant you put it in.

To make sure that the bees do not "steal a march" on you by tearing down some of these grafted cells and starting others from the queen or brood they have, a 1¼-inch slim wire-nail can be stuck through the comb immediately over the grafted cell, when, if anything of the kind happens, you will know all about it. Then, if you wish to secure as many queens from this colony as possible while the old queen lives, the hive can be opened twice a week and graft all the cells having royal jelly in them at each time of opening, and later, at each opening take out the ripe cells before any queen emerges. In this way, I have taken from 50 to 200 queens from such a colony, each of



which proved equally good with the best of those reared from swarming cells.

It is now fully agreed by all, that queens reared under this superseding impulse are equally good with those from natural swarming, and the above is only taking advantage of such a colony to get a more numerous queen offspring than the bees would otherwise mature. If there are not enough cells started by the bees to furnish what queens are desired, the cell-cup plan can be used to good advantage here. In other words, imitation embryo queen-cells are made out of beeswax, into which royal jelly is placed, when a larva from our best breeding queen is transferred to this royal jelly, when from 12 to 20 of these prepared cells are given to this colony that is about to supersede its queen, when the bees will perfect them, or at least most of them, just as they would one of the grafted cells spoken of before. And by giving a batch of these prepared cell-cups twice a week, we can often secure from 500 to 1000 fine queens from this superseding colony before their queen fails entirely.

Why I have dwelt this long on this superseding matter is that even the novice can rear good queens where such a colony is found. And where such a colony can be had early in the season or late in the fall, the bees will do good work, while a colony made queenless will often produce only inferior queens in the hands of the most skilled queen-breeder.

Now, if such a colony can not be found we can rear good queens with strong colonies at any time there are plenty of young bees and brood in any hive. It has been known for some years that where a part of the brood in any colony has the queen shut from it by using the queen-excluding metal to partition off part of the hive, or by putting it over a strong colony, and an upper story containing this brood set on top of this excluder, the bees going and coming through the queen-excluder will work on the same plan they do when superseding a queen. In this way, hundreds if not thousands of bee-keepers rear their queens by the cell-cup plan, as given above, without being obliged to wait for superseding of queens, swarming of colonies, or anything else.

The thing to look after is that there are plenty of nurse-bees and brood for them to nurse in the part not having the queen, and that they be fed abundantly at any time, or times, when nectar is not coming in from the fields. But there is one item that should not be overlooked in this matter, which is the tendency with some to use too old larvæ. Mr. Cowan has shown that there is no practical difference in the food given all larvæ till they reach 2 days old, the only difference being that a larva in a queen-cell built by a superseding colony is fed more abundantly. But as any larva under favorable circumstances, and less than 2 days old, has far more food supplied to it than it can consume, this extra abundance fed to the one in the queen-cell has no bearing on the subject. But after 2 days old there is a tendency to scrimp on the food, and so it is well to

choose a larva under 2 days old rather than over.

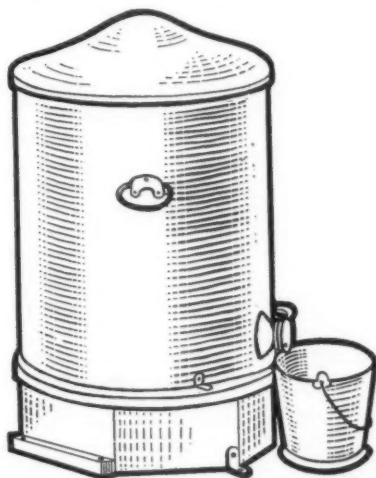
And it is no hard matter to know the ages of larvæ. Take a nice, clean comb and give it to the colony having your best breeding queen, putting the same in the center of the brood-nest. In from 72 to 76 hours the first eggs laid in this comb will have hatched. Look at these larvæ now, and again every 12 hours until they are 2 days old, when it can be told almost to a certainty ever afterward how a larva 36 hours old looks, at which time it is in a proper condition to transfer.

Borodino, N. Y.

## Fastening the Honey-Extractor and How to Use It

BY G. C. GREINER.

Does every producer of extracted honey know that securely fastening the honey-extractor is of great importance if we wish to do the most work with the least labor? The swinging motion of the extractor, as it follows the un-



HONEY-EXTRACTOR FASTENED FOR USE.

even load of the comb-baskets, greatly reduces the efficiency of the centrifugal force by which the honey is thrown out of the combs. The effect is somewhat similar to punching or cutting iron on a soft-wood block—it requires heavier blows, and more of them, to produce the same effect, than it would if a solid anvil were used as a foundation. The same principle applies to the work of a poorly and a substantially fastened extractor. The better and stronger its anchorage to counteract this swinging motion, the less speed and fewer revolutions are required to accomplish a certain object. To think that a few screws or a little nailing down on any haphazard store-box will answer, is a mistake.

It requires, in the first place, a sound, solid floor; if it is springy and does not hold the extractor firmly in its place, braces from above may be necessary. The building I used as an extracting room before I had my present honey-house built, had that kind of a floor, and I had to resort to braces fastened to the upper floor. This did very well to keep the extractor from

swinging, but it never was very satisfactory—the braces were always more or less in the way when moving about.

Then a solidly built stand or bench is the next requirement to give the extractor the desired stability, and when this is thoroughly fastened to a solid floor, we can dispense with the braces from above, and have an extractor that is practically immovable, and will do the best work with the least labor.

After trying different ways of fastening the extractor, which always proved more or less faulty, because I never had the gumption to do it as it should be done, I have now a stand that "stands" where it is placed, and no amount of cranking will disturb it.

The accompanying drawing gives the idea. It consists of a hexagonal, cell-shaped box made of 1½-inch lumber, which is covered by a circular top about 3 inches larger than the extractor. This gives a 1½-inch projection all around to receive the screws of the extractor foot-braces. The box has cleats 1½x1½ inches on two opposite sides, which are nailed edgewise to the lower edge and fastened to the floor by two 2-inch screws each. In addition to these the opposite corners, which are not reached by the cleats, have iron hooks similar to those of the extractor, which are also screwed to the floor. Thus every corner of the box is anchored, and the whole stand forms a foundation, which is, for all intents and purposes, as solid as a block of concrete.

The extractor is so placed on the stand that the honey-gate is in the center of a cleatless side, where a circular notch is cut out of the top to accommodate the pail when the honey is drawn from the extractor.

The height of the stand is determined by the pail we intend to use. It should not be any higher than is strictly necessary, for every inch added to height makes it just so much more unhandy to lift the combs back and forth.

The foregoing may answer as a solution of the first part of the above heading; it is a problem easily solved. Not so the second part—how to use it.

We all know that there is a great difference in honey. Some is thick, some thin, some is new or just made, and some is left on the hive until late in the season. Then there is a great difference in the temperature of the honey, as well as of the atmosphere, and who knows but that the different sources from which honey is made has some bearing on the subject? All these different conditions require different management of the extractor to obtain satisfactory results.

During all my extracting operations I have been groping in the dark. I never knew just what speed to apply, nor how long to run the extractor to throw all the honey out of the combs. By closely watching the extractor, and examining the combs, I was led to adopt a certain amount of speed and number of revolutions, which I thought would be sufficient to give me, reasonably, all that there was in it. Now comes a little experience that knocks all my philosophy into slivers.

At one time last summer, when I was extracting my first honey, I had the comb-baskets full of empty combs, just

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taken from the extractor, sitting by the door ready to take them out and exchange for full ones. My scales are sitting on the end of the bench near this same door, and more for pastime than for any particular purpose I hardly knew why I did it, I took two of these empty combs out of the basket and placed them on the scoop of the scales. After noting their weight, I took them back to the extractor and went through the same ceremony as I did the first time, when they were full of honey. And what was the result? They weighed 11 ounces—almost  $\frac{3}{4}$  of a pound less than they did when I placed them in the extractor.

I do not say that these 11 ounces would be a positive loss if left in the combs, for I imagine that they would eventually, in one way or another, arrive in the tanks with the rest of the crop. But when extracting 100 combs these 11 ounces would figure up somewhere near 30 pounds, and wouldn't it be unnecessary labor to carry them continually back and forth when a little more time at the extractor would save all this trouble?

When the combs are once in the extractor, it takes hardly a minute to reverse the baskets a second time, and give the combs a second extracting. Only a few revolutions with high speed are necessary to secure those 11 ounces. Reversing the baskets a second time has the effect of "shaking the honey loose," as we might call it, and, if practiced, will certainly produce cleaner combs.

La Salle, N. Y.

### The Wonderful Eyes of Bees

BY C. P. DADANT.

I do not believe that there exists in the entire animal creation a single living being endowed with a better system of vision than the honey-bee.

The eyes of bees are 3 in number—3 small round eyes or "ocelli," arranged in a triangle at the top of the head, and 2 large compound eyes formed of thousands of facets, each of which may be considered as a separate eye.

The ocelli are said by scientists to be those which enable the bees to see within the hive in the dark. Although no positive evidence can be offered, this seems quite evident. The entire organization of the hive, the building of combs, the handling and sealing of honey, the rearing of brood, the making of cells of different shape according to the requirements, indicate that in addition to the antennæ, which are organs of touch and of feeling, and perhaps also of hearing, the bees must be able to see in dark places. Their actions within the hive are very deliberate, and there is no groping.

It is, however, in the action of their compound eyes, and in the organization of those eyes that the greatest wonders are encountered. We, who enjoy the possession of two eyes only, know how much help they are to us, and realize how necessary they are when we accidentally or temporarily lose the sight of one of them. But the bee's compound eyes are composed, according to the best authorities, of thousands of facets, which are practi-

cally separate eyes, and as they are placed at each side of the head they permit them to see in all directions. If we compare our vision (we who have but two eyes) when one eye is closed, with our full sight, we may perhaps gain a faint idea of the power of sight of an insect endowed with 6300 eyes on each side of the head. This is the number of eye-facets approximately counted by Cheshire. These facets face in almost every possible direction—forward, backward, up and down.

Every being is endowed by Nature, through the "struggle for life" and the "survival of the fittest," with the most necessary instruments for the purposes to be fulfilled. The honey-bee, hatched in a dark cavity, a tree-trunk, a cave, is destined, after it has fully matured, to soar about the country, seeking for its food in the broadest sunshine during the hottest time of the year. It needs to fly among trees, high in the air or low down among weeds, reeds and grasses, with the wind bending their twigs in every direction. It leaves its home on a bright day, must recognize the spot and return to it without error, under penalty of death from starvation, fatigue, cold, or the poisonous stings of other bees defending their home against intruders. Thus we see the young worker-bee, at her first flight, and the queen, or the drone as well, turn about in circles constantly increasing, to mark the exact position of the home. So well does the bee ascertain the exact location that if the hive be moved only a few inches, and there is within a short distance some means of comparison, you will see her hunt about the spot where the hive ought to be, even if it is right by.

When hives of similar colors and shape are placed side by side in long files, the bees sometimes make a mistake. This does not happen, however, if there is a tree, a stump—some noticeable object which will enable them to take eye-measurements.

So well have the bees marked the location of their home that it is said by some that they must have a sixth sense, which they call the "sense of direction." They forget that the ability to direct themselves to and from their home is entirely lost as soon as you take them away from the radius of their accustomed flight. It is well known by those who make it a business to transport bees, that if their hives are moved without caution within a radius of 2 miles, the old workers, or a portion of them, will return to the home location. The distance from which they can recognize the direction of their home changes with the topographical conditions. In a very level country, without timber or natural obstructions, they find their location much farther than in situations where hills, large tracts of timber, and other impediments narrow their flight and their view. Where they have never traveled, they lose all sense of direction.

If it were true, as some modern writers would have us believe, that the bee's sight is dim, how could they find their way among trees and branches without difficulty? How could they lower themselves among the grasses, down to the little white clover blossoms modestly hiding itself and brought to their

notice only through its fragrance and the smell of the nectar which it carries? How could they find the crack or crevice or the woodpecker's hole in the tree-trunk? How could they find the key-hole in the careless grocer's back door, with the leaky case of honey lying behind it?

The swarm issues and gathers on a limb. A few bees have alighted, then more, then more, till the swarm has settled. Scouts have gone ahead in every direction. They are gone an hour, perhaps two, but soon one of them comes back. She has found a suitable place. How does she tell it? We do not know. But often, though not always, the swarm follows a scout in a bee-line to the hollow tree or the lining of some frame house, between the plaster and the weather-board, or perhaps to some empty hive hidden among the grass and neglected by the careless owner. Here let me say that empty hives with entrance wide open, and inside made ready for a swarm, are much more likely to be occupied voluntarily by a swarm, if placed up on a high stand than if left down in the grass. But the fact that even when left in the grass hives are often entered by swarms, is a very good evidence of their powerful sight.

When you open a hive of bees, if you are careful not to disturb them too much, you will need but little smoke. Then after the combs are uncovered, some of the old bees come to the top to ascertain whence comes the light so extraordinarily given. Make a quick motion and dozens of them will jump at you, resenting the action. Or if two persons stand in front of a hive and the guards become irritated, they fly at the person who makes a quick motion, regarding him as a dangerous enemy, while they leave unmolested the quiet spectator. Should the two ears of a horse appear over the hedge or the fence 40 feet away, when they are in this irritated condition, and should the horse shake them at flies, they will at once pounce upon those ears.

Endless instances could be given of the excellent sight of bees at long or short range. It seems to me that we must acknowledge that few living beings are so well provided in this line as is the honey-bee.

The drones, as it appears, have a still greater number of facets to their compound eyes than the workers. An approximate number of some 26,000 facets have been counted in the eyes of a drone. Think of 26,000 organs of sight in a single living being! Can we have an adequate conception of what this means? And to what purpose? For the pursuit of the queen, evidently. The queen's life is very important to the colony. She goes out to mate, and if she is lost the colony is often helpless. So she must mate promptly. That is why so many drones are reared, and why they have such powerful organs of vision, the strength of which is plainly beyond the powers of our imagination to realize.

That there is a middle point between day vision with the compound eyes and night vision with the ocelli, where the bees are partially blinded, does not, however, admit of a doubt. Working



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with bees at night shows us that although they can see at very short range, they are unable to see in the dark a foot or two away. For that reason it is unadvisable to handle bees at night.

Hamilton, Ill.

## A National Foul Brood Law

BY W. C. MORRIS.

Foul brood is on the increase, and is about as bad in States where there are rigid laws, and inspectors paid to inspect, as in States where there are no such laws. Certain portions of New York State, with a supposedly perfect law, and enough inspectors to do the work, are in a rotten condition. Mr. W. L. Coggeshall, of Groton, N. Y., with his out-apiaries in all directions for 20 miles or more, is fighting the disease all the time; and bee-keepers near him are allowed to keep bees in box-hives. The man with one or two hives doesn't care if he has foul brood or not. The bee-keeper with 200 colonies or more near by must suffer for his negligence. There should be a National law passed doing away with the box-hive. I know this will be said by some to be in the interest of the bee-supply men. A man can use a soap-box if he desires, but he would have to make frames to go in that box—a few cents would buy enough  $\frac{3}{4} \times \frac{1}{2}$  inch strips to make these frames.

No bees should be allowed to be moved from one State to another without inspection. I know of one instance where a colony of bees shipped from New Jersey to Long Island were diseased with "foul brood," and although this man had other bees, he discovered something was wrong, sent for one of the New York State inspectors who treated (?) the colony, and told him it was all right; but shortly after he noticed it was not all right. He dug a large hole, and after dark closed the entrance and buried the hive. If he hadn't done this probably the whole of Long Island would now be diseased.

All queen-breeders should have a clean bill of health from the State or National government. There is no law preventing a queen-breeder from selling queens from diseased colonies. Bee-keepers should always change any queens, from the cages they come in, to new cages. If you desire to use the cage again, boil it, and be sure your bees do not get at the candy in the cage.

No honey from a diseased colony should be allowed to be sold. You couldn't pay me to eat it, and I doubt if the Editor would care to eat honey from a stinking, rotten colony in the advanced stages of foul brood. Where does the delicate aroma fit here?

No Cuban honey should be allowed to come to this country; as the whole of Cuba is rotten with foul brood. This also applies to any other foreign country where there is foul brood. Even bees come in from Cuba without examination as to whether they are diseased or not.

In Jamaica, B. W. I., you can not bring a bee into the island; and queens are changed to new cages by the bee-inspector, and the bees and cage

burned in the furnace of the ship they came over in.

Some will say, Why not allow diseased honey to be sold? First, foul brood is a filthy disease, and filth and clean honey are not possible. Second, my neighbor, Mrs. Smith, goes to her grocer and buys a bottle of honey; put up by Solomon Isaacs, of New York city, who has bought some diseased New Jersey honey, or some cheap diseased Cuban honey at 5 cents a pound. Mrs. Smith uses all the honey that will run out of the bottle, then throws the unwashed bottle in the ash-barrel. Five minutes later my bees are cleaning the bottle out. Result, foul brood.

It is time we get down to business on this foul-brood proposition. I have never had a diseased colony, but I am anxious and willing to do everything in my power to help those who have, and also to protect myself. If every bee-keeper would examine the bees in his neighborhood, and report suspicious cases to the inspectors, it would help. Look at Jamaica, B. W. I., a hot country conducive to disease, and only one inspector, and not a diseased colony there!

Yonkers, N. Y.

## Breeding Out the Swarming Impulse

BY DR. A. F. BONNEY.

The sooner bee-keepers quit thinking of getting a non-swarming strain of bees, and devote their time and energy to learning to control the impulse to swarm, or to devising appliances to aid in this control, the more money they will make out of apiculture. This is a blunt proposition, but the logic of events is proving my contentions, for we seem to be no nearer to a non-swarming strain of bees than we were 50 years ago, while discussions in the bee-papers have brought out statements from some of the oldest men in the profession, showing that but few believe such a sort of bee possible. Moreover, the editors of the bee-papers generally hesitate to endorse the non-swarming idea.

This article is inspired by frequent allusions to the 31st chapter of Genesis (30th in the Douay edition), and while I do not like to drag the Good Book into discussions of this kind, on account of the impression that may get out regarding my soundness in the faith, I feel that a reply should be made, and as not one reader in a hundred has the least idea in the world what said chapter says, and would probably have to borrow a Bible to read it, I shall state briefly that Jacob was to have all the sheep which were spotted, and to get the advantage of his father-in-law he peeled sticks of wood and placed them before the animals during the breeding season, by which means "he was enriched exceedingly." This story has nothing to do with anything but the color of hair on a lot of quadrupeds.

Inasmuch as there are several millions of people in the world who do not even know of the Bible, but do keep bees, this testimony should never have been introduced, but so long as it

has, let me suggest that those who believe—because the story is in the Bible—that animals can or ever could be marked by putting striped sticks before them, that they try it. Sheep and goats have not changed one whit since those days, and I assert that limbs or logs of trees peeled and placed before the animals will not make them spotted. If you think it will, try it. Mind you, *belief* is not evidence. The spotting of animals comes from a different cause—the crossing of two animals of the same breed but of different colors, as a black horse and a white one, and when such an animal is bred again to a brown we get what the Mexicans call a "pinto" or "calico," and I have seen them with spots of white, brown, black, and gray thrown in for good measure. Breeding "calicoes" one to another, one frequently gets plain colors, for there is always a strong tendency to revert to the original type.

People who write about breeding tails off of sheep and cats, and horns off of cattle, merely advertise their ignorance of natural history, for the memory of man does not go back to the time when there were not hornless cattle, "mule-toed" hogs and tailless cats, for man did not breed the tail off the Manx cat any more than he did of the bob or wild cat. The cat found in the Isle of Man is a distinct species or variety of the cat, and found nowhere else on earth. Regarding muley, or polled cattle, the Century Dictionary, quoting the American National XXII, 802, says: "Muley cattle have been in Virginia a great many years, and *their descendants have been uniformly polled.*"

The italics in the quotation are mine, for in them is the gist of the argument, for the muley is a distinct breed of cattle just as was the long-horn of Texas—cattle with horns which would measure 6 feet and more from tip to tip. The muley is not from a "sport," nor were the horns bred off by man. If any one doubts this, let him read further:

"The Drumlanrig and Ardrossan herds are extinct. These herds were horned, the latter having latterly become polled *on the introduction of polled bulls from Hamilton.*"

Again the Italics are mine. Now any one with the slightest knowledge of natural history must know that the Ardrossan *horned* cattle could never have been extinguished by anything but an established blood, *aided by selection*, for Nature is ever trying to revert to the original type, and had the muley been from a "sport," the horned blood would have prevailed and the polled sport would have been extinguished, just as a white rat, or other albino, bred to another of natural color will be first spotted, then in a few generations be wiped out. It may be as well to tell the uninformed that albinos all have pink eyes. They are not a white breed.

The finest breed of chickens in the world would soon run out if not fostered by man, for they are originally from "sports" and selection," and if the muley cow was not as old in the history of the world as is the porcupine, the mule-eared deer, and the razor-back hog, we should soon know it, but "their descendants are uniformly polled." The tailless cats of the Isle of Man have always been tailless, so far as

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we know, and no one knows when the mule-footed hog became so. We know that in the dawn of history the hog was cloven-hoofed, for the Mosaic law was aimed at the filthy hog. The law-givers knew nothing about bacteriology, but they observed that those who ate freely of pork became diseased, and as the priests in those days were the law-makers, what they said "went."

The unknown is always a safe refuge for ignorance, and "because we can not control the male of the bee in mating we can not have a non-swarming strain." What evidence, may I ask, have we that we should be able to perpetuate race suicide in the bees were we able to have control their mating? Not a scintilla. It is a mere theory, and in connection with this I suggest to Mr. Hand that the various bee-papers will find something to discuss long after his non-swarming hive-bottom has been relegated to the scrap-pile.

Mind, I do not claim that we can not somewhat modify the tendency of *some* bees to swarm in *some* localities and in some hives, but just when we least desire that they swarm, off they will come in clouds. The above is written remembering an article in a recent bee-paper where the writer describes a successful method of preventing swarming, then knocks his whole story in the head by telling about the horrible drouth they had (1910). Evidently the man did not know that bees will not swarm when there is a drouth on, and mine did not in 1910, when one was impending. One colony built one queen-cell.

"Prove all things and hold fast to that which is good," is as good a rule of conduct now as when first enunciated. Prove that by controlling parentage you can control swarming before stating as a fact that you can; I might go further and say: Prove that a strain of non-swarming bees is a desideratum. Some bee-men seem to think that with non-swarming bees, the honey would come in by the ton where we now get pounds. Would it? I tell you I doubt it. I more than half suspect that if we were to establish such bees, we would find ourselves with a lot of insects which would store only what they needed, for I do not think bees are over-active when about to supersede. Would not the little things find out that they did not have to work so hard? I have learned modesty from Dr. Miller, and will say, "I don't know." Do you?

Little children, let us above all things be precise. An unbelievable assertion that I have cured a hundred cases of rheumatism by the aid of bee-stings will not improve my reputation for veracity; a claim that I have a strain of bees which will under no circumstances and in no kind of hive ever swarm will only provoke smiles of indulgent disbelief; and so on down the list. Consider how little we really know about the animals we are working with; how the need of the almighty dollar stands as a barrier to observation, study and progress. Prove all things, and you will find that since man began handling bees we have learned so little that we are still dreaming of the impossible. Do not, I beg, add to the "hybrid" (mule) error by writing about semi-hibernation, when hibernate means

only to pass the winter in a close place. Would semi-hibernate mean to pass half the winter in a close place?

Remember that "belief" proves nothing, and that the word is often erroneously used for *faith*, which, according to the Encyclopedia Britannica, means "the acceptance as true which is *not known to be true*." We may have *faith* in the possibility of a non-swarming strain of bees, but lacking evidence we can not believe it, much less know it.

Buck Grove, Iowa.

## Relation of Bees and Flowers

BY W. M. PARRISH.

I will endeavor to show the relation between bees and flowers, as well as the dependence of the one upon the other. Of course, there are other insects that fertilize blossoms, but nearly all the credit should be bestowed upon the honey-bees, as they visit more different kinds of flowers, and in ten times larger numbers than all other insects combined, and at fruit-blooming time all the credit can be given to the bee.

To the farmer and fruit-grower the honey-bee is nothing less than a philanthropist, because if it were not for the busy little bee in its untiring flight from flower to flower, their alfalfa and fruit-trees would not seed and fruit.

Some think that a perfect flower, or, in other words, a flower having both stamens and pistils, fertilizes itself, but there is no end to the ways or contrivances that flowers have to prevent self-fertilization. For instance, in some flowers the stamens or pollen-producing anthers are a great deal lower than the stigma, and the pollen may all drop to the base of the flower, and the ovary go unfertilized; while in the flowers like the milk-weed, the way they are fertilized by the bee, and the contrivances they have to prevent self-fertilization, are simply wonderful and indescribable. This being the case, it can easily be seen that flowers are dependent upon some insect for fertilization, and nine times out of ten it is the honey-bee.

Some think that flowers are fertilized by wind, but there are a very small percent of blossoms fertilized by wind-carried pollen. If any doubt this, it can be proven to their entire satisfaction by selecting a limb on a fruit-tree just before it comes into bloom. First, count the buds, then cover up with mosquito-netting or cheese-cloth. Tie the netting or cloth bag around the limb tightly, so that no insects can get under it, and you will find a very small percent, indeed, if any, set fruit.

Nearly every tree, shrub and flower, with the exception of the grass family, such as corn, millet, timothy, wheat, etc., have their insect, or several kinds of insects, to fertilize their blossoms, and there are a few varieties of plants that have only one kind of insect to carry pollen for them. This is why some plants become sterile when taken from their native land where that particular insect abounds.

When red clover was first introduced into Australia, it would not produce seed until they imported bumble-bees from the United States. This shows a

plant having only one kind of insect to fertilize its blossoms, also a perfect flower not fertilizing itself, as, if you will examine red-clover blossoms, you will find it has both stamens and pistils.

Flowers, in order to attract and entice bees to fertilize their blossoms, secrete a very fragrant or aromatic liquid called nectar. The breast and legs of the bee are covered with little, hook-shape hairs, and so constructed that in gathering this nectar the pollen is taken automatically from the flower.

The stigma of flowers secrete a sticky, resinous substance, so as to catch and hold the fertilizing dust or pollen when the pollen-covered legs or breast of the bee comes in contact with it, and it is estimated that one bee visits several hundred blossoms in its course of a single journey, hence it can be readily seen the great value of the honey-bee in cross-pollenization.

In some plants, such as willows, fertilization would be impossible without the help of insects, because such plants are diecious, having their staminate blossoms on one tree, and their pistillate blossoms on another. The bee, after visiting the staminate blossoms for pollen goes to the others for nectar, hence fecundation is effected.

The soft maple, when in bloom, is very interesting as well as unique, for on the same tree or limb you will find two kinds of blossoms—staminate and pistillate, or, in other words, male and female. Staminate blossoms never produce seed—they furnish only the fertilizer, called pollen; as in plant life so it is the same in higher life. The bee transfers the pollen from the stamens of the male blossoms to the pistils of the female blossoms, where it grows, sending a long thread-like tube into the ovary, thus fertilizing the ovule and producing a seed or fruit.

Horticulturists talk about the wind fertilizing their fruit-blossoms, but I am sure that if any one will take the time and pains to investigate he will soon learn that fruit-trees, etc., depend almost entirely upon the industrious little bee for the fertilization of their blossoms.—Read at the Kansas State Convention.

Lawrence, Kan.

## "The Honey-Money Stories"

This is a 64-page and cover booklet, 5¼ by 8½ inches in size, and printed on enameled paper. It contains a variety of short, bright stories, mixed with facts and interesting items about honey and its use. It has 31 half-tone pictures, mostly of apiaries or apiarian scenes; also 3 bee-songs, namely: "The Hum of the Bees in the Apple-Tree Bloom," and "Buck-wheat Cakes and Honey," and "The Bee-Keeper's Lullaby." It ought to be in the hands of every one not familiar with the food-value of honey. Its object is to create a larger demand for honey. It is sent postpaid for 25 cents, but we will mail a single copy as a sample for 15 cents, 5 copies for 60 cents, or 10 copies by express for \$1.00. A copy with the American Bee Journal one year—both for \$1.10. Send all orders to the American Bee Journal.



# American Bee Journal

## DR. MILLER'S



## ANSWERS

Send Questions either to the office of the American Bee Journal or direct to  
DR. C. C. MILLER, MARENGO, ILL.  
He does NOT answer bee-keeping questions by mail.

### Extracting Supers and Combs from Infected Colonies, Etc.

1. Are extracting supers that have been used on hives infected with American foul brood, after being extracted, safe to use on healthy colonies?
2. Are combs that have contained American foul brood, and later filled with honey by a diseased colony, then extracted, safe to use again on healthy colonies over queen-excluders?
3. Is there any gain with a new swarm of bees by feeding them for a week or 10 days?
4. Is the State bee-inspector paid by the State, or by those whose bees he inspects?

ILLINOIS.

ANSWERS.—1. Some say yes, some say no. I suspect that the truth is that sometimes the disease is thereby conveyed, and sometimes not. It will be the safe thing to avoid using them.

2. No.

3. That depends upon the weather and honey-flow. If a heavy flow is on, it is not worth while to feed. If, however, the weather should suddenly turn bad so that nothing could be gathered from the fields, it would pay big to feed; otherwise everything would be at a stand-still, if, indeed, starvation did not result.

4. The State pays.

### Transferring Bees from a Cable-Box

How can I transfer bees from a telephone cable-box on a pole to a standard hive? It must be a plan to move them in about 3 hours' notice. I keep bees at home with success, but have never been able to make a successful transfer from a cable-box.

NEW YORK.

ANSWER.—If the combs are clear of the wires, all you have to do is to smoke the bees and cut out the combs; but if the wires are all through the combs I'm afraid it's a rather hopeless case to try to save the combs. You might, however, get out the bees by heavy smoking or using chloroform.

### Transferring Bees to New Frames and Hives

I have 6 colonies just now Italianized, in all sizes and kinds of hives. I don't like to interfere now until the honey-flow is over, but would like to transfer all my bees into 10-frame dovetailed hives, as in the old hives all the frames are not wired, and are so difficult to handle. Just yesterday, when it was or degrees in the shade, I was examining for queen-cells, and when I held the frame up against the light, off fell the whole comb and the queen on the ground, and I was just lucky to find the queen to-day. Such things would not happen if the frames were wired. Now, would it be too late to remove (transfer) the bees by Aug. 1st, from the old hives and combs to the new hives with frames with full sheets of foundation?

I read in Alexander's book that the best way to do this is to place an empty body with frames having full sheets of foundation over the old hive. Then take a brood-frame with the queen from below and put in the upper hives, and put a queen-excluder between the 2 hives, and in 3 weeks the hive below can be taken away, and you have on top a new-made hive, as the bees will carry all the honey from below into the upper hive, and the hive below will contain only old, empty combs, good for wax, and the upper hives can be put on the place of the old hives. Now, I read again the reverse from the breeders. They advise putting the old hives on top, so I would like to know which is the proper, quickest and surest way to transfer, as I stated, after Aug. 1st, so I can have my bees removed on new frames and into new hives, with full storage for the winter.

WISCONSIN.

ANSWER.—Whether you can get new combs built out after Aug. 1st depends upon the honey-flow. If there is a heavy fall flow

it will be all right; if there is a dearth, it may be a bad failure. So unless you feel pretty sure of a good flow after you give the foundation you would better not undertake it.

Bees will build comb either above or below an excluder. Below seems the more natural way, as bees left to themselves always have their brood below and honey above.

You do not say whether you work for comb honey or extracted. If you work for extracted, you can have your combs built out nicely in the early flow, and without interfering at all with the honey crop. Just before swarming begins, or as soon as bees begin to work well on clover, put the queen with one frame of brood below the excluder, filling out the lower story with frames of foundation, and put a frame of foundation in the upper story. As soon as the queen has made a start at laying on one or more of the frames of foundation—that will likely be in 2 to 4 days—let the old frame of brood in the lower story exchange places with the frame of foundation in the upper story. Eight days after making this last exchange it will be well to kill queen-cells, if any, in the upper story. As fast as the brood hatches out above, the cells will be filled with honey, and the upper story will become an extracting-chamber. In no other way will you probably succeed so well in getting your new combs built. This is just a little variation from the Demaree plan of preventing swarming, and will allow a big crop of honey if the season is favorable.

### Brood-Chamber Honey-Bound—Moving Bees to Buckwheat Flow

1. Clover is in full flow here, and while the bees are not as strong as desirable, owing to the late spring, they are working well, but they seem to have too much honey in the brood-chamber. This is mostly old honey, and as my hives are only 8-frame, they need all the space possible for brood. I have no extractor. Is there any way to get this honey from the combs into the sections, or can I make the bees dispose of it in any way?

2. I have 25 colonies of bees which I want to move about 35 miles for a buckwheat flow which begins in early August. The nights are quite cool then. Do you think there would be danger of the combs melting? They are mostly old, and the new ones are wired.

NEW YORK.

ANSWERS.—1. It is something unusual to have too much honey in the brood-chamber, and you will likely find that there will be no trouble about it. When the bees get to storing in supers, if there is not as much room as they want for the brood, they will most likely empty the honey out of some of the cells and carry it upstairs. If you think they are not doing this as much as you would like, you might uncup some of the sealed honey. You can also take out a comb that is filled with honey, replacing it with an empty comb or a frame filled with foundation. These frames of sealed honey can be kept over until needed, for it would be nothing strange if you might need them this fall, and almost certain that you may need some another spring, for it is the usual thing that frames of sealed honey are needed in the spring. Or, if there is no danger that neighbors' bees would get the honey, you might set out the frames of honey for the bees to rob out, and they would use it the same as honey from the field.

2. If you give the ventilation that is needed for the welfare of the bees, there is little danger of the combs melting down. A spraying of cold water on the way will help matters.

### Colony at a Standstill—Putting On Supers

1. I have one colony of bees that seems to be at a standstill, and has been for about 10 to 14 days. They carry some pollen and honey, but are not nearly as active as they

should be. I looked into the hive when I first noticed it and found they had brood, and about a week later I looked again and found they did not have as much. They have plenty of honey, so that can not be the trouble. I looked for the queen but could not find her, but I think I did not take enough time to find her. Can you tell what is wrong, and what I can do for her?

2. An old man in this vicinity, who has been keeping bees for about 30 years, told me to put on the super at about clover bloom, and when one-half full put on another one under the one-half full one, and about a week later change again by putting the top one at the bottom, etc. What is your opinion?

3. Another tells me to try the above change about once a week, and to take out the one-pound sections as soon as one is full, and replace by empty ones, and in this way the bees are not so apt to swarm as to put on supers.

IOWA.

ANSWERS.—1. I'm afraid the colony is queenless, and that when you examined there was nothing but sealed brood present. If that is the trouble, the remedy is to furnish the colony with a queen or a queen-cell, or else to unite it with another colony, perhaps a weak colony having a good queen.

2. The advice is all right till it comes to that last change, having the two supers exchange places, and instead of that you may find it better to put a third super under as soon as the second is half filled, provided a good flow is still on.

3. It's a good deal of work to take out one section at a time, and you will probably hinder swarming just as much by putting fresh supers under as fast as there is any need for them.

### Making Candy for Queen-Cages

How can I make queen-candy for introducing-cages?

COLORADO.

ANSWER.—Heat a little extracted honey (don't burn it), and stir into it some powdered sugar. Keep adding all the sugar you can until you have a stiff dough. Even after you seem to have it quite stiff you can still knead in more sugar. Then let it stand a day or so, and very likely you can knead in a little more sugar. No danger of getting it too thin. You will notice that no definite quantities are given, but you will use several times as much sugar as honey. At a rough guess I should say that if you begin with one spoonful of honey you will have 5 spoonfuls of candy. Of course, if at any time you should get in too much sugar you can add honey. It is not really necessary to heat the honey, only it hurries up the work a little.

### Moving Bees On the Railroad

I am expecting to move in about 3 months, and the distance is about 40 miles, which will be by railroad, the bees loaded in a car. How shall I arrange them, as I have about 27 colonies in dovetail standard hives. How early can they be moved this fall?

NEW JERSEY.

ANSWER.—By giving enough ventilation you can ship at any time, but perhaps the best time will be just before cold weather sets in, say late in October. Then you will have the advantage of cool weather, with less danger of suffocation, and with less danger of combs breaking down from the heat; whereas, if you wait till very cold weather there is danger of combs breaking, being brittle with the cold.

Put your hives in the car with the frames running from front to rear, that is, parallel with the track. If you do not pile one on top of the other it will be very easy to fasten them in the car. Just nail strips of inch boards on the floor about each hive, so it can not move in any direction. If you pile one on another, then timbers running across the car and fastened with cleats at the sides of the car must keep the hives from moving.

### Feeding Foul-Broody Honey—Hive-Covers

1. Yesterday I received a letter from Washington, D. C., telling me the sample of brood was European foul brood. I am at work, and now there is a good honey-flow. I have no extractor, nor is there one near me. Moth had gotten in lots of the weak colonies, so I had to cut them out to save them. I have no time to get an extractor. I will render the wax tomorrow. There will be 100 or more pounds of chunk honey. A little of it is old honey and the balance new. If I boil

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it hard, will it be safe to feed back to the bees? If so, how long must I boil it? Must I mix water with it? If so, how much? I do not want to take any chances in feeding it. The honey-flow will soon be over here, and I will need the honey to build up the colonies. This is the first year we have had a good honey-flow for 4 years.

2. I thoroughly boil all the hives and supers. I use a T-super with solid separators. Will it be safe to use the separators again if not boiled, or if boiled?

3. I make my hive-covers of 2 pieces. I can not get lumber wide enough for one piece. The crack between the 2 pieces is over the center of the hive, so it is difficult to keep them from leaking. They are made of 7/8-inch pine. If I cover them with tin, and keep them painted, will that make them too warm? They work all right, except the leaking.

KENTUCKY.

ANSWERS.—1. Spores have been known to grow after being kept at a temperature of 212 degrees for 2½ hours. So it may be best to boil the honey for 3 hours. If you try to boil the undiluted honey, you will find the outside part may be boiling for some time while the central part is still comparatively cool; also there is much danger of burning. So it is best to use half as much water as honey, and perhaps better still to use equal parts, and let it continue to boil 3 hours after it begins to boil.

2. I would not be afraid to use the separators without boiling.

3. The tin will not make your hive-covers too warm. There is another way you might like to try, which will be cheaper. Paint the cover, and immediately while the paint is still wet, cover the crack with a piece of cotton-cloth about 3 inches wide, bedding the cloth down in the paint. When dry, paint over the cloth and all.

## Colors and Markings of Bees—Saving Queen-Cells—Nucleus

1. I have a tested queen I bought last spring. I introduced her to a colony of hybrids or blacks, and she was accepted by them; all her workers were 5-banded and showed up nicely, but I notice now that about half of the workers are tailed off solidly black. Why is this?

2. When you have say a half-dozen queen-cells in a hive, how do you manage to hatch and save all the queens?

3. Is there any difference in color of the 5-banded Italians and golden Italians? If so, what?

4. What do you mean by "nucleus?" Say 2 or 3 frames of brood and bees—is this what you call a nucleus?

5. How small an amount of bees with queen can be developed into a good colony?

TENNESSEE.

ANSWERS.—1. I don't know why there should be any change. Are you sure the same queen is present? The bees may have superseded her, and her daughter, mating with a dark drone, would have darker workers.

2. There is no way in which you can safely keep a number of queen-cells in the same hive except to imprison them in a queen-nursery or in queen-cages. Any number can be kept up to the time the first one hatches out, and then she will make it her business to slaughter her baby sisters in their cradles.

3. So far as I know, they are the same.

4. Yes, a very small colony, consisting of 1, 2, or 3 frames of brood and bees is called a nucleus.

5. That depends. Given a season long enough, and a single frame of brood with enough bees to cover it might build up into a colony before winter. But that would be quite exceptional. Beginning at the time when nuclei are usually formed, it would generally need 3 frames of brood and bees to be safe; and then it might be a failure if the season should be poor.

## Why Bitter Honey?

As I have never seen anything in the American Bee Journal about bitter honey, I wish to ask a few questions about the causes of bitter honey. In this locality we sometimes have an early honey-flow which is very bitter, from some cause or other. The old-time bee-keepers claim it is from hoarhound blossoms, but I have not decided whether it is from hoarhound or not, as chinquapin and wild grapes are in bloom the same time as the hoarhound. The honey has a taste that resembles the smell of chinquapin blossoms. So I laid to the chinquapin the cause of the honey being bitter.

The bees worked extensively on chinqua-

pin and wild grapes this season, which is not common in this section. But they always work well on hoarhound every year. So if it is hoarhound that is the cause, why is it that the early flow is not always bitter every year? My bees worked well on hoarhound last year, and there was not even the slightest bitter taste in the honey. This makes it look as if it might be something else.

Probably some one more experienced in bee-keeping will give the reason why the honey is bitter.

Probably it is the dry weather that is the cause, for it was dry this year when the hoarhound was in bloom. Does any one know whether wild grapes or chinquapin yield bitter honey? Can any one say whether hoarhound blossoms yield honey that is bitter?

ARKANSAS.

ANSWER.—I don't know enough about the matter to help out any, but this will bring the question "before the meeting" so that we may get some information from some one who is informed. Naturally one would rather expect hoarhound honey to be bitter, but it does not always follow that a plant of a certain flavor will produce honey of the same flavor. The honey having the odor of chinquapin would point to chinquapin as the source of the bitterness. I don't know anything about chinquapin honey. If it is of mild odor, then the evidence is pretty strong against it. But if the odor of chinquapin honey is very strong, then it might be that a very little chinquapin honey added to hoarhound honey would give the odor; while the hoarhound would give all the bitterness.

## A Beginner's Questions

1. I had a colony of bees destroyed by moth on account of its being queenless. When I saw the bees could not, or would not, get the best of the moth, I took out all the frames and saved about 4 which the moth had not touched. I shook the bees on the ground, and in less than 15 minutes they were with the colony next to where they had been. Did you ever have bees unite that way?

2. When a colony becomes queenless, what is the best way to requeen? Give them a sealed queen-cell or a frame of brood, or what would you do?

3. In taking a frame of brood from some other colony and replacing with a frame with full sheet of foundation, do you think it would set back the bees?

4. And would it keep them from swarming a little longer?

5. When a colony is weak, how do you get them good and strong?

6. Which month in the fall do you think is best for feeding bees in this part of Iowa?

7. What plan do you consider best to increase artificially? Kindly name page in "Forty Years Among the Bees."

8. What is a nucleus? Is it also called "queen-cell?"

9. On page 266, in "Langstroth on the Hive and Honey-Bee," is a cut of queen-cells—rudimentary cell. In seeing this in a frame of comb, does it look as though there is a worm in the cell?

10. Is there no way to tell when the first swarms will come off?

11. Do bees usually hang out before swarming?

IOWA.

ANSWERS.—1. I'm not sure I ever had a colony unite with its next neighbor when brushed on the ground, but I have had them do it without being thrown on the ground.

2. A cell just ready to hatch will gain about 12 days over giving a frame of brood, and a laying queen will be about 10 days better still, so if I hadn't the laying queen I would prefer the cell to the frame of brood. If it was very early in the season, I would unite with a weak colony having a good queen, rather than to give the frame of brood.

3. That depends. Early in the season, if the colony has only 3 or 4 frames of brood it would set them back very much. In the full flow it would make little difference to a strong colony.

4. It would have a tendency that way.

5. Let them alone until some other colony or colonies have become quite strong. Then swap one of the frames of brood of the weak colony for one that is nearly all sealed from a strong colony. Or, take from a strong colony a sealed frame with adhering bees, and give to the weakling. Or, shake on the ground in front of the weak colony the bees from a frame of brood, and the young bees will crawl into the weak colony while the older bees will fly back home. Either way may be repeated in a week or 10 days.

6. In August or September if there is no fall flow. In October if there is a fall flow. But when there is a fall flow there is generally no need to feed.

7. It depends upon circumstances. Generally, perhaps the nucleus plan is best—"Forty Years Among the Bees," page 268—although increase without nuclei (page 260) has its advantages.

8. A nucleus is a baby colony, having bees enough to cover one to 3 frames of brood. The plural of nucleus is nuclei; one nucleus, two nuclei. A nucleus is never rightly called a queen-cell.

9. The rudimentary queen-cell referred to is so little advanced that it is almost certainly entirely empty. When it is a little farther advanced an egg will be found in it, and not till 3 days after the egg is there will there be found anything that looks like a worm.

10. Yes; look for queen-cells in the hive. If you find eggs in them, you may expect a swarm inside of 8 or 9 days, and the prime swarm will issue about the time the first cell is sealed.

11. Sometimes, and sometimes not. A colony may hang out without swarming, and it may swarm without hanging out.

## Producing Section Honey—National Bee-Keepers' Association

1. How can I make a success in producing section honey? My bees do not work well in sections. This year I used extracting frames and sections alternately in the hives. The extracting frames would be full and capped, and now 2 weeks later the sections are just ready to remove. The extracting frames were replaced, and are full again and ready to extract. Under such conditions does it pay to bother with the sections at all?

2. Of what practical benefit is the National Bee-Keepers' Association to the small bee-keeper? I was a member during 4 years, but aside from getting a copy of the Annual Report I was unable to see that it was of any benefit to me, so I quit. These Annual Reports are good, of course, but each succeeding copy largely duplicates its predecessors. I would resume membership if I could see that the National Association is effective.

ILLINOIS.

ANSWERS.—1. "Under such conditions" I wonder that your success with sections was as great as it was. You probably know that it is generally estimated that about 50 per cent more extracted honey per colony can be obtained than of comb. And you know that bees will begin to fill honey in drawn-out comb when they will hesitate about starting work on comb foundation. That's the reason that "bait-sections" are used to get the bees to start work. As I understand it, you alternated sections with drawn-out combs. The bees begin to fill the drawn combs, and having room enough in these they saw no need to do much on the foundation until the comb was filled and they needed more room. After a start is made in the super, if you take away the extracting combs, you will be likely to find that the bees will do better on sections. Even then, it may be that you will do better with extracted honey, depending upon your market and other things.

2. A good many years ago a bee-keeper in Wisconsin was sued by a troublesome neighbor, with the charge that the bees drove the sheep out of the neighbor's pasture. A number of us chipped in a dollar each to help the bee-keeper stand the cost of the suit, and that was the real beginning of the present National Association. The Association has helped out many a bee-keeper who has had troublesome neighbors, and been sued by them, and there is no telling how many others would have had trouble if it had not been for precedents established by the Association. Nowadays bee-keepers have little fear that suit will be brought against them, obliging them to move their bees or give up bee-keeping. All that is largely due to the National Association, and all bee-keepers have the benefit of it. The Association has done a little in the line of general advertising to help the honey market, and there is now a project on foot to do much more in that direction. The great trouble is that so many bee-keepers hesitate to pay a dollar for the general good unless they can at once get back two dollars for it. If all would heartily unite, it does not seem a very wild notion to believe that in the near future every dollar paid into the National treasury would bring back ten, if not many times ten.



## The Late W. Z. Hutchinson

(Continued from First Page.)

remarkable work of her late husband, a unanimous vote was taken to send to Mrs. Hutchinson an expression of sympathy. This was the first assembly of bee keepers since Mr. Hutchinson's death, and, while there was no official organization, it was decided that such expression should be made, and the letter sent to Mrs. Hutchinson reads as follows:

AMHERST, MASS., June 8, 1911.  
MRS. W. Z. HUTCHINSON—  
Dear Madam:—On June 6 and 7, 1911, there was held under the direction of the Massachusetts Agricultural College a convention of bee-keepers, which was attended by something over 100 persons from various parts of Eastern United States.

This was the first bee-keepers' assembly since the death of Mr. Hutchinson, the news of which came to us unexpectedly and as a shock. During our morning session of June 7th, several of the prominent bee-keepers announced their sympathy. It was a unanimous expression that the bee-keeping world has lost an individualistic leader, a clear, concise writer, whose place is not soon to be filled. The most sincere sympathy of those assembled is extended to you. It was desired that this be expressed also through the apicultural press.

BURTON N. GATES.

In the foregoing estimate of the life and work of Mr. Hutchinson, and the expression of sympathy for Mrs. Hutchinson in her bereavement, bee-keepers everywhere will unitedly join.

We have received the following tribute from the Hon. Eugene Secor:

### In Memoriam—W. Z. Hutchinson

A giant of the oaks the forest knew  
Had stood for years among its sturdy kind,  
As one that had the stuff of youth within,  
And all the sinewy winds that taught reliance.

It had a grip upon the soil that made  
It tower above its neighbors round about,  
And men said, "Lo, here is a princely tree—  
One that the winds may rock but not uproot."

But one sad day the Keeper of the wood  
Marked this tall, growing tree for other use,  
And then the sapplings and maturer trees  
Began at once to say among themselves:

"How the great heart of this strong, Kingly oak  
Ever encouraged us to grow and grow,  
Toward that which is the good of our desires!  
Alas, that he, our friend, should pass so soon."

Forest City, Iowa, EUGENE SECOR.

**Bees and Honey at Illinois Fair.**—We have received a copy of the premium list of the Illinois State Fair for 1911, which will be held at Springfield Sept. 29th to Oct. 7th. W. E. Davis, of Libertyville, Ill., is superintendent of the Apiary Department. Any one interested in seeing a list of the premiums offered for the display of bees, honey, beeswax, etc., can secure a copy by writing to Mr. Davis. As usual, the cash premiums are very liberal, and should induce a large number of bee-keepers to make an exhibit. The Illinois State Fair is one of the largest and best in the United States, and its apian displays are usually fine.

## REPORTS AND EXPERIENCES



### Rather Discouraging Outlook

Bees wintered fairly well, but there was but little rain last year and this spring. There is little clover in sight. Prospects are poor.  
J. H. FITCH.  
Bedford, Iowa, May 25.

### White Clover Crop a Failure

Our white clover crop is a failure here this year. The bees are just making a living at this time, but basswood has an immense crop of buds just ready to open.  
Dunlap, Iowa, June 15. E. S. MILES.

### Prospects for Fine Honey Crop

Michigan is very short on bees, but prospects are fine for a honey crop from what bees there are to gather it, especially the north three-quarters of the State.  
A. G. WOODMAN CO.  
Grand Rapids, Mich., June 8.

### Good Results this Season

The results this season have been very good. I have already extracted and sold 180 pounds of clover honey, and expect to secure as much or more in a few days. Had we had more rain, the season would have been much longer.  
H. F. FITCH.  
Harrisburg, Ill., June 14.

### A Good Canadian Report

Bees are doing well. Some colonies have given as much as 80 pounds of surplus honey already, and the yield from clover is only about half over. I have had very little swarming so far. I think the honey-flow is too heavy—it keeps the bees too busy gathering, so they have no time to swarm.  
EDWARD T. KNOLL.  
Clarksburg, Ont., June 22.

### Report of the Season So Far

The white clover honey-flow here is over for this season. It was cut short by very dry weather. I started out the past spring with 10 colonies, increased to 18, and produced over 300 pounds of chunk-comb and extracted honey. I get 15 cents per pound for my honey. I made the second trip to town this morning with 70 pounds of honey, and sold it all.  
F. A. WICKLEIN.  
Percy, Ill., June 27.

### Prospects Good for Bees

The prospects for the bees in this county are good. I think they are the best that I have ever seen at this time of the year. Bees wintered well, as a rule, all over the county, and the early spring was very favorable, so that they are getting in excellent condition for the honey harvest, which will soon be on, as the first blossoms are opening. The weather has been too dry, but we are having a nice, steady rain that will help greatly.  
Caribou, Maine, June 13. O. B. GRIFFIN.

### Very Peculiar Season

So far this has been a very peculiar season for bees. The fruit-bloom was profuse and unusually full of nectar. The same may be said of soft and hard maple, and the different kinds of oak. I never before saw bees working on oak-bloom. Honey-dew was in great plenty for a few days in May, and bees stored a small amount in the upper stories. After a few days of honey-dew we had a slight rain, and the honey-dew disappeared as mysteriously as it came. May was very dry, and the clover crop was damaged very materially.  
Since May 1st we have had rain enough to start the clover to some extent, and what little bloom there is seems to yield freely of nectar. Basswood is extremely full of

bloom, and also of nectar, and the bees are working it for all there is in it.

Our main dependence here for honey is clover, and as the clover crop is short the honey crop will be short. Clover hay will sell here at a premium of 100 percent or better, next winter.

Since I have been keeping bees I have never seen a spring when it was so easy to build up colonies strong as the past one. I have never had so many colonies extra-strong as now. Out of 24 colonies, spring count, I have had only 9 prime swarms and one afterswarm. Most of colonies seem too busy to swarm. Some of the neighbors report excessive swarming, and many swarms absconding. I am expecting a partial honey crop even if the clover-bloom is a failure.  
Cromwell, Ind., June 26. E. H. URSON.

### Very Good Season for Bees

So far this has been a very good season for bees, but I fear the frost we have had during the last week has damaged some of their forage. The shrub called buckberry or ironberry is in full bloom, and the bees are busy working on that; also white clover. I expect a good honey crop, but can tell better after a while. Yet there is no harm in expecting a good crop, anyway.

I find a great many helpful things in the American Bee Journal, and all of it is interesting to any one who cares for bees.

MRS. GERTRUDE L. GOODWIN.

Roy, Wash., June 23.

### Moving Bees in Cool Weather

I sold 50 colonies of bees to a man in Gardner, Ill., early in March. The weather was quite cold when the bees were prepared for shipment, but it had been warm a few days before so that the bees had had several cleansing flights.

The hives were prepared by nailing cleats at each corner of the hive, so as to hold bottom-boards and covers securely to the hive-bodies, and then a strip of wire-cloth was cut and nailed to close the entrances. Then a cleat about 1/2-inch space was nailed across the alighting-board about 1/4 inch in front of the strip of wire-cloth. There was no ventilation given except that afforded by the 1/2-inch entrances. The weather was quite cold the day the hives were taken to the car, and remained so for several days afterward. The car was a week on the road, but Mr. Howard wrote me that the bees came through in perfect condition. He said there was not a teaspoonful of dead bees in the whole lot.

At the time I shipped these bees I moved the rest of the bees (nearly 100 colonies) to a new location about 10 rods distant. These were moved on a wheelbarrow, and nothing done to hinder the return to the old location except that a little feed was given, if the weather got so warm that the bees could fly freely.  
EDWIN BEVINS.

Decatur, Iowa, May 26.

### Hemet Valley Association

On May 27, 1911, the bee-keepers of this Valley formed an association to be known as the "Hemet Valley Bee-Keepers' Association," and nearly all the bee-men in this end of the county have joined, or signified their intention of so doing. The officers elected for the first year were as follows: C. J. Davidson, president; W. S. Rather, secretary; and W. B. Tripp, treasurer. There were also elected 5 directors, as follows: J. A. St. John, W. H. Densmore, W. B. Tripp, C. J. Davidson, and Chas. Sims. Rather Bros. were chosen as business agents. This is regarded as a wise step by the bee-keepers, for the reason that for years they have acted individually in the sale of their honey, generally selling to the first buyer who came along and told them of the immense crops that were being gathered from Maine to Texas, and how cheap the article would be next week, as soon as the real conditions became known, etc.

Realizing the importance of organization to get the best results from their labor, and

# American Bee Journal

also realizing the fact that the rearing of bees and production of honey and beeswax in this section of the country are growing each year, and would in the near future, if it does not already, cut some figure in the price of honey in the State of California, they decided to pool their interests and accumulate their output in one place, and advertise to the world the fact that we produce the purest and best honey to be found in our country, and endeavor to create a market for it, especially in the East.

The business managers are making every effort to reach the responsible buyers, and have already received an offer of 7 cents per pound for the entire season's output.

Last year all of our honey was sold at 5½ cents. Our neighbors in the Imperial Valley got 6 cents for their inferior quality. They were organized—we were not.

The conditions in our section are about as follows: The bees, as a general thing, came through the winter in good shape, there being very little mortality, the bee-men, as a rule, having left them plenty of food to carry them through. The season has been somewhat backward on account of the cold weather, but the late rains were very advantageous, and brought out and kept the flowers in fine bloom, and the reports are that the bees are now working over-time and storing honey very fast. Should these favorable conditions last, the output will be some larger than last year, and the honey will be of a superior quality, there being a larger quantity of white than last season.

W. S. RATHER, Sec.

## Poor Prospects this Season

This is my second year in the bee-business. I had 18 colonies, spring count, last year, increased to 28, and got 1100 pounds of comb honey. The prospects are very poor this year. We have had no rain for 2 months, and the clover is almost gone. Bees have almost quit work. I have had no swarming yet.

D. C. PUGH.

Columbus Grove, Ohio, May 17.

## Poorest Season in 8 Years

This is the poorest season for bees that we have had here for 8 years. Clover is all dead, and the drouth has been so severe that there will be no fall honey-flow. I am feeding bees right now to keep them from starvation, just when the flow should be at its best.

D. G. LITTLE.

Hartley, Iowa, June 28.

## No Honey this Year

There will be no honey here this year, either for home trade or for shipment. The total gain for my strong colony on scales was less than 50 pounds, and the white clover flow is all over. I can remember but one year so bad. I think that was in 1901, and the next year made up for the failure, as my apiary in 1902 averaged nearly 250 pounds surplus per colony.

Well, we bee-keepers are a happy lot, always looking ahead. I expect next year to be in the game again, but we are surely "out of running" now for this year. We had a very wet spring, but it turned out very dry at a fatal time for white clover. There is probably enough honey to tide us over until fall. If there is a good fall flow we may not have to feed. Bees did not swarm at all here. They seemed to know all about it better than I did.

IRVING E. LONG.

Marceline, Mo., June 13.

## Smoking Bees at the Hive-Entrance

It is rather amusing as to the different ideas that men have who have been in the bee-business, and naturally have had the same experience. One says not to inject smoke at the hive-entrance; another, just as good authority, says he always does when manipulating.

I do not wish to comment on what Dr. Miller, D. M. Macdonald, or W. Woodley says, but it seems to me there are times when it is best to use smoke, and other times it is best not to use it. For instance, when we are extracting, and a good honey-flow, it only confuses the bees at the entrance to smoke them, and has no effect on the bees we are handling; but when there is nothing doing, and the bees idle, we certainly need some smoke at the entrance. They are watching for a job, and will soon get busy if smoke is not used.

In many respects bees are much like people. When men are idle, they are on the

alert, noticing everything going on; but if busy, and plenty of work, they take very little notice of what is going on around them. It is the same as with J. E. Chambers' plan of prevention of swarming—the bees have plenty to eat, and all the room they need, so they are not crowded; of course they don't care to move, neither would we. If Mr. Chambers were in some localities, with all the ventilation and room possible, I think he would have swarms, and plenty of them. It depends much upon how the honey-flow begins. With a light flow continuously, bees will swarm, not caring much—are not storing much, and would just as soon have a big time as not; but if a heavy flow, they haven't time to swarm; they wait until the heavy flow is over, then swarm. They do here in California, sometimes, at least. They did 2 years ago. Quite a few colonies swarmed in August, and the last extracting was done about the first of July.

This is a cold, late spring; bees were in bad shape; at least 50 percent died; but they have built up fast. The honey-flow is on, and we expect a fair crop. GEO. W. RICH.

Simi, Cal., May 22.

## Honey Crop Better

The honey crop has been a little better than ordinary in this locality this year, so we have harvested a good crop.

Lanark, Ark., June 26. E. M. CALLAWAY.

## Looks Bad for Bee-Men

It looks bad here for bee-men this year. My prospect is for not over 300 or 400 pounds from 50 colonies, from the clover and bass-wood and I think mixed considerably with honey-dew, and nothing so far to indicate a fall flow. I have had only 2 swarms. Just the "rompers" have put up any surplus, and I will say the American Bee Journal and one other strain have divided honors as leaders!

Cainsville, Mo., June 28. J. FRENCH.

## Poor Prospect for Iowa White Clover

Unless Dame Nature supplies a substitute for white clover, I fear Iowa will not flood the market with honey this year. Except for a very few much-favored places where it was protected by snow, or supplied with moisture in some other way, white clover is all dried out. In open fields one would need a "search warrant" to be able to find even a lonely plant. What is true of this locality (Buena Vista Co.) is also true of the entire northwest corner of this State, at least. The meager rains, along with the small amount of moisture from the winter snow, have been ample up to the present time for cultivated crops, but unless we can get frequent showers even the corn and other grain will suffer. It has been too dry for the germination of the clover seed; hence, unless heavy rains come very soon to start the clover from the seed, the effects will be felt for another year or two.

Both yellow and white sweet clover are in good evidence along roadsides and waste places. This will help out considerably. Milkweed, too, will not be affected by the drouth, and is in good evidence, probably, all over the State. Good weather through fruit-bloom has resulted in fine fertilization of the bloom by the bees, and the trees are already groaning under the weight to which they are subjected.

F. W. HALL.

Storm Lake, Iowa, June 5.

**Special Car for Minneapolis.**—We have arranged with the Chicago & North-Western Railroad for a special observation and electric-lighted Pullman sleeping car to leave its New Chicago Terminal (see last page) at 6:45 p.m., Aug. 29th, and arrive in Minneapolis the next morning at 7:55 o'clock—in ample time to attend the first session of the National convention. The round-trip railroad fare from Chicago will be \$16.00, with a return time-limit until Oct. 31, if desired. The berth rate in the Pullman sleeper is \$2.00 for a lower berth, or \$1.60 for an upper.

We hope that just as many bee-keepers from the East and South will plan

to assemble here in Chicago on Aug. 29th, so as to go on "in a bunch" from here to Minneapolis. It will give us a pleasant evening together. We will be glad to make berth reservations for all who will notify us up to the day before starting. Next month we may have more particulars to announce. In the meantime make your arrangements to join this car-load unless you live in the wrong direction to avail yourself of it.

## California Honey Crop and Prices.

Mr. W. A. Pryal, of Oakland, Cal., who is not only a bee-keeper, but keeps in close touch with things apicultural on the Pacific Coast, and particularly in California, has sent us the following paragraphs taken from the Oakland Enquirer, on June 23, 1911, which shows the honey conditions and prospects in California for 1911:

With fewer bees because of the hard winter and a shorter time for them to work, due to a late season, the price of honey stands at such a high level that there is no speculation on the present market, buyers say.

The total honey crop this season, it is predicted, will be a little more than half the production of a normal year. Honey brokers say the buyers they have sent out report that the prospective yield in the seven Southern California counties and the Sacramento Valley, a total of 225 carloads from the State.

The yield in a normal year is between 350 and 400 carloads. Last year's crop was little larger than that predicted for this year.

The season, which lasts for about 100 days ordinarily, started about 10 days late, and will be that much shorter. The white honey crop now is at its best. The amber season will be at its height in a week or two.

White honey started the season and is holding firm at around 7½ cents a pound, carload lots to Eastern buyers, which level was not reached until late in the season last year. This season's present price is from 1 cent to 1½ cents above normal for the whole crop. Amber is holding firm at from 6¼ to 6½ cents, carload lots for the East. The market is stable for both grades. Trading is as required for actual orders only, dealers say.

It is to the hard winter that the honey shortage generally is attributed. The first rains of the season were early, and when the late, cold rains came the bees were in a weakened condition and could not combat the elements. Apiarists generally report their losses from one-third to one-half their colonies.

However, conditions are not so bad as first seemed probable. The alfalfa is in excellent shape, it is reported, and the few bees are doing their best work now in favorable weather.

**Connecticut Field-Day.**—Allen Latham, A. W. Yates, and E. C. Griswold will give demonstrations at the annual Field-Day of the Connecticut Bee-Keepers' Association, Saturday, July 15, at the apiary of Mr. Yates, Foul Brood Inspector, 3 Chapman St., Hartford. All welcome.

JAS. A. SMITH, Sec.

Hartford, Conn.

## "The Amateur Bee-Keeper"

This is a booklet of 86 pages, written by Mr. J. W. Rouse, of Missouri. It is mainly for beginners—amateur bee-keepers—as its name indicates. It is a valuable little work, revised this year, and contains the methods of a practical, up-to-date bee-keeper of many years' experience. It is fully illustrated. Price, postpaid, 25 cents; or with the American Bee Journal one year—both for \$1.10. Send all orders to the office of the American Bee Journal.



# American Bee Journal

## Wants, Exchanges, Etc.

[Advertisements in this department will be inserted at 15 cents per line, with no discounts of any kind. Notices here cannot be less than two lines. If wanted in this department, you must say so when ordering.]

FOR SALE—160-lb. honey-kegs at 50c each f.o.b. factory. N. L. Stevens, Moravia, N. Y.

CYPRO-Carniolan Queens—Untested, 75 cts. Ed L. Roser, 5108 Euclid Ave., Suite 12, Cleveland, Ohio.

FOR SALE—Tested Italian Queens, \$1.25; Untested, 75 cts. each. W. Simpson, Meyer, Ill.

QUEENS from my EDUCATED strain of Golden Italians. \$3.00 to \$100. 5A4t Henry W. Britton, Stoughton, Mass.

FOR SALE—Bees, honey, and bee-supplies. We are in the market for beeswax and honey. 5A4t Ogden Bee & Honey Co., Ogden Utah.

FINE Golden Italian Queens—Tested, \$1.00; Select Tested, \$1.25; Untested, 60c; dozen \$7. 6A2 D. T. Gaster, Rt. 2, Randleman, N. C.

ITALIAN Untested Queens, 75 cents; Tested, \$1.25. Breeders, \$5.00 each. E. M. Collyer, 8A12t 75 Broadway, Ossining, N. Y.

WANTED—Early orders for the Old Reliable Bingham Bee-Smokers. Address, 12A4t T. F. Bingham, Alma, Mich.

WANTED—8 pounds live bees—no queens. Delivery any time before Sept. 1st. Quote best price. Halsey Bros. Co., 645 St. Clair St., Chicago, Ill.

FOR SALE—About one hundred Black and Hybrid Queens: all young and prolific. Six for \$2.50; one doz., \$4.50. 7A2t D. E. Brothers, Jacksonville, Ark.

FOR SALE—Golden Queens that produce 50 to 100 percent 5-banded bees. Untested, \$1; Tested \$1.50; Select Tes., \$2; Breeders, \$5 to \$10. 8A12t J. B. Brockwell, Bradley's Store, Va.

FOR SALE—A Kenmore automobile delivery car; most handy for a bee-keeper with an out-apiary. Will sell cheap. In A No. 1 running order. Almost new. Address, 7A4t Louis Werner, Edwardsville, Ill.

YOU MAY ORDER Root's Bee-Supplies from any catalog published by them, and send me the order. I'll get it to you in quick time. Or call yourself on Geo. S. Graffam, Valley Ave., Bangor, Maine.

ITALIAN QUEENS from imported and home-bred stock—the best in the world, 75c each; 6, \$4.00; 12, \$7.50. Tested, \$1.25 each. Safe arrival guaranteed. N. Forehand, 5A4t Ft. Deposit, Ala.

SECOND-HAND CANS—Good ones, two 5-gal. in a box—5 boxes at 40 cts. a box; 10 boxes at 35 cts. a box; or 20 boxes at 30 cts. a box. Address, George W. York & Co., 117 N. Jefferson St., Chicago, Ill.

ITALIAN QUEENS, good as the best; untested, 75c; tested, \$1.00. Shipments begin April 1st for Bees by the Pound and Nuclei. Write for prices. C. B. Bankston, 5A4t Buffalo, Leon Co., Texas.

FOR SALE—5000 lbs. Yellow Sweet Clover Seed, new crop (biennial); 4 lbs. hulled, by mail, prepaid, \$1.10; 50 to 100 lbs., 15 cts. per lb.; unhulled, 3 cts. per pound less. Alfalfa Seed, \$16.00 per 100 pounds. 7A4t R. L. Snodgrass, Rt. 4, Augusta, Kan.

GOLDEN QUEENS—very gentle, very hardy, and great surplus gatherers. Untested, five and six band, \$1.00; select tested, \$3.00; also nuclei and full colonies. Send for circular and price list to Geo. M. Steele, 5A3 30 So. 40th St., Philadelphia, Pa.

Colonies of Italian bees in L. hives, 10-fr., built on full brood-fdn., wired, body and sh. super, redw., dovet., 3 coats white, sheeted lids, each neat, modern and full-stored—any time. Jos. Wallrath, Antioch, Cal. 2A4t

FOR SALE.—148 acres of mixed land, a 6-room house with cellar, a good well of water in yard—in Victoria County, 9 miles from P. O. A fine location for a small apiary. Will sell for \$25 per acre—half the amount down, and balance on good payments to suit the buyer. Direct all enquiries to—F. W. Coleman, Whittaker, Burleson Co., Tex.

FOR SALE.—500 3 and 5 Band Queens. Not Cheap Queens, but Queens Cheap. 3-Band Queens as follows: Untested Queens—1 for 75 cts.; 6 for \$4.20. Tested Queens—1 for \$1; 6 for \$5.70. 5-Band Queens as follows: Untested Queens—1 for \$1.00; 6 for \$5.70. Tested Queens—1 for \$1.50; 6 for \$8.70. "Directions for Building Up Weak Colonies." 10 cts. 2A4t W. J. Littlefield, Little Rock, Ark.

BEESWAX WANTED.—We are paying 28 cents, cash, per pound for good, pure yellow beeswax delivered at our office. If you want the money promptly for your beeswax, ship it to us, either by express or freight. A strong bag is the best in which to ship beeswax. Quantity and distance from Chicago should decide as to freight or express. Perhaps under 25 pounds would better be sent by express, if distance is not too great. Address, GEORGE W. YORK & Co., 117 N. Jefferson St., Chicago, Ill.

FOR SALE.—A box containing 35 pounds of Extra Thin Surplus Foundation made last winter by Dadants, from my last year's beeswax. The box has not been opened. Ready for shipment. On account of dry weather I cannot use it this season; will make discount. Also volumes of the American Bee Journal since about 1893—some in Wood Binders. Also a large number of volumes of Gleanings, and also some parts of volumes of the Bee-Keepers' Review, A Reitsche Press, and Lewis Foundation Fastener. Let me know what you want. Edwin Bevins, Leon, Iowa.

NATIONAL LETTER-HEADS.—N. E. France, Platteville, Wis., General Manager of the National Bee-Keepers' Association, takes orders from members for printed letter-heads. The paper is white, and then printed with black ink, which makes them very neat and business-like. Every member of the National ought to use these letter-heads. They show a list of the Officers and Board of Directors, and, of course, will have added the name and address of the member ordering any of them, at these prepaid prices, which are "cash with order": 250 sheets, \$1.30; 500 sheets, \$2.00; 1000 sheets, \$3.75. All orders are to be sent to Mr. France.

## Poultry

FOR SALE—Duston White Wyandottes, \$2; 15 eggs, \$1; \$5 per 100. 11A4t Elmer Gimlin, Taylorville, Ill.

## Honey to Sell or Wanted

FOR SALE.—Choice light-amber extracted honey—thick, well-ripened, delicious flavor. Price 6 cents per lb. in new 60-lb. cans. 2A4t J. P. Moore, Morgan, Ky.

WANTED.—Choice extracted white and amber honey in barrels or cans. Send sample, and price delivered f. o. b. Preston. 11A4t M. V. Facey, Preston, Minn.

WILL PAY for early shipments of good flavored clean honey. Extracted, 60-lb. cans, 8c. Comb in sections, frames or boxes, 15c net weight. F. O. B. Baxter Springs, Kan. 3A4t O. N. Baldwin

FOR SALE.—Absolutely pure California sage extracted honey; several cars white and light amber, in 60-lb. tins, two tins to a case. Write us for samples and prices. Rather Bros., Managers, Hemet Valley Bee-Keepers' Association, 7A4t Hemet, Cal.

**Advertising Honey for Sale.**—More and more as the seasons come and go, those who deal in honey consult the advertising columns of the American Bee Journal when they want to buy honey. If you have harvested a good crop, it will doubtless pay you well to offer it through our advertising columns. You will find rates in the first column on the second page. There is no reason why you should not get a cent or two more a pound for your honey if it is all good quality and in good shape for safe shipping. If you have never advertised honey for sale, suppose you begin this fall. A 12-line advertisement in our classified columns would cost only \$1.80, or a 6-line advertisement only 90 cents, per month. Most of those who have honey for sale can easily get their announcement into 6 lines. Suppose you begin with the next number, and keep it going for a few months. If you have the right kind of honey, and ask the right price for it, we think there is no question of your disposing of it at enough higher price not only to pay your advertising, but also to pay you handsomely for the extra effort made in shipping your honey. All advertisements should be in our office not later than the first of the month for that month's number. Should it be delayed not later than the 5th or 6th of the month, it may yet be in time for it to appear, depending upon whether or not the forms are closed when your advertisement arrives. There ought to be several pages of advertisements offering honey for sale in the American Bee Journal every month for the next 6 months. Suppose you try this plan and see how it works.

"Southern Bee-Culture" is the name of a booklet written by J. J. Wilder, perhaps the most extensive bee-keeper and honey-producer in the whole State of Georgia. It is a real hand-book of Southern bee-keeping, with methods so simply described that they are easy to carry out. Every bee-keeper, especially in the South, should have a copy of Mr. Wilder's booklet. He conducts apiaries by the dozen, and produces many tons of honey every season. He tells in careful detail just how he does it. The price of this booklet is 50 cents, or we now club it with the American Bee Journal for a year—both for \$1.30. Send all orders to the American Bee Journal, 117 North Jefferson St., Chicago, Ill.

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# SPECIAL CLUBBING AND PREMIUM OFFERS

## In Connection With The AMERICAN BEE JOURNAL

Sample copies free, to help you interest your friends and get subscriptions. If you will send us names of your neighbors or friends we will mail them sample copies free. After they have received their copies, with a little talk you can get some to subscribe and so either get your own subscription free or receive some of the useful premiums below. They're worth getting. We give you a year's subscription free for sending us 3 new subscriptions at \$1.00 each.

### BEE-KEEPERS' NOVELTY POCKET-KNIFE



Your name and address put on one side of the handle as shown in cut, and on the other side pictures of a queen-bee, a worker, and a drone. The handle is celluloid and transparent, through which is seen your name. If you lose this knife it can be returned to you, or serves to identify you if you happen to be injured fatally, or are unconscious. Cut is exact size. Be sure to write exact name and address. Knife delivered in two weeks. Price of knife alone, postpaid, \$1.10. With year's subscription, \$1.90. Free for 3 new \$1 subscriptions.

### BEE-KEEPER'S GOLD-NIB FOUNTAIN PEN

A really good pen. As far as true usefulness goes it is equal to any of the higher-priced, much-advertised pens. If you pay more it's the name you're charged for. The Gold Nib is guaranteed 14 Karat gold, iridium pointed. The holder is hard-rubber, handsomely finished. The cover fits snugly and can't slip off because it slightly wedges over the barrel at either end. This pen is non-leakable. It is very easily cleaned, the pen-point and feeder being quickly removed. The simple feeder gives a uniform supply of ink to the pen-point without dropping, blotting or spotting. Every bee-keeper ought to carry one in his vest-pocket. Comes in box with directions and filler. Each pen guaranteed. Here shown 1/2 actual size. Price alone, postpaid, \$1.00. With a year's subscription, \$1.70. Given free for 3 new subscriptions at \$1.00 each.

### QUEEN-CLIPPING DEVICE



The Monette Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. 4 1/2 inches high. It is used by many bee-keepers. Full printed directions sent with each one.

Price alone, postpaid, 25 cents. With a year's subscription, \$1.10. Given free for 2 new subscriptions at \$1.00 each.

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A special tool invented by a Minnesota bee-keeper, adapted for prying up supers and for general work around the apiary. Made of malleable iron, 8 1/4 inches long. The middle part is 1 1/16 inches wide and 7/32 thick. The smaller end is 1 7/8 inches long, 1/2 inch wide, and 7/32 thick, ending like a screw-driver. The larger end is wedge-shaped having a sharp, semi-circular edge, making it almost perfect for prying up covers, supers, etc., as it does not mar the wood. Dr. Miller, who has used it since 1903 says, January 7, 1907: "I think as much of the tool as ever." Price alone, postpaid, 40 cents. With a year's subscription, \$1.20. Given free for 2 new subscriptions at \$1.00 each.

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These are untested, standard-bred, Italian Queens, reports of which have been highly satisfactory. They are active breeders, and produce good workers.

Sent only after May 1st. Orders booked any time



for 1908 queens. Safe delivery guaranteed. Price, 90 cents each, 6 for \$4.50, or 12 for \$8.50. One queen with a year's subscription, \$1.60. Free for 2 new \$1 subscriptions.

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A "Teddy Bear" on good terms with everybody including the bees swarming out of the old-fashioned "skep." Size 3 1/4 x 5 1/4, printed in four colors. Blank space 1 1/4 x 3 inches for writing. Prices—3, postpaid, 10 cents; 10 for 25 cents. Ten with a year's subscription, \$1.10. 6 given free for one \$1.00 subscription.

### BOOKS FOR BEE-KEEPERS

**Forty Years Among the Bees**, by Dr. C. C. Miller.—334 pages, bound in handsome cloth, with gold letters and design, illustrated with 112 beautiful half-tone pictures, taken by Dr. Miller. It is a good, live story of successful bee-keeping by one of the masters, and shows just how Dr. Miller works with bees. Price alone, \$1.00. With a year's subscription, \$1.75. GIVEN FREE for 3 new subscriptions at \$1.00 each.

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Produce workers that fill the supers, and are not inclined to swarm. They have won a world-wide reputation for honey-gathering, hardiness, gentleness, etc.

My Queens are all bred from my best long-tongued three-banded red-clover stock (no other race bred in my apiaries), and the cells are built in strong colonies well supplied with young bees.

PRICES:—Untested Queens, \$1.00 each; six, \$5.00; doz., \$9.00. Select Untested, \$1.25 each; six, \$6.00; doz., \$11.00. Safe arrival and satisfaction guaranteed. Descriptive Circular Free. Address, 6Atf

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My strain of bees is the result of many years' breeding and selection. I believe they are equal to any, and surpassed by none. They are long-lived, winter well, breed early, and are unexcelled honey-getters. The workers are long-bodied, good-sized bees, uniformly marked with bands of orange yellow. They are good comb-builders, gentle and easy to handle, and yet protect their homes from robbers. You will make no mistake in introducing these queens into your apiary. I guarantee safe delivery at your post-office, and make a specialty of long and difficult shipments. I endeavor to keep a large supply of queens on hand. Prices as follows:

Untested—1, 60c; 6, \$3.25; 12, \$6.00. Select Untested—1, 75c; 6, \$4.25; 12, \$8.00. Tested—1, \$1.25; 6, \$5.50; 12, \$12.00. Select Tested—1, \$1.50; 6, \$8.00; 12, \$15.00. Two-comb Nuclei with laying queens, \$3.00 each; 3-comb Nuclei with laying queens, \$3.50 each. Discounts on large orders. 7A4t

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Select queens.....	\$ 75	\$ 4 00	\$ 7 00	
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Choice Home-Bred and Imported Stock. All my Queens reared in Full Colonies.

Prices for July to Nov.  
One Untes. Queen... \$0.75  
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Safe arrival guaranteed. For prices on larger quantities, and description of each grade of Queens, send for free Catalog and Sample Foundation.

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By the best known method, selected of the Best honey-gatherers, and for Beauty and Size of bees, with the care that the best of apiary-men can give, which makes a fine Queen in quality.

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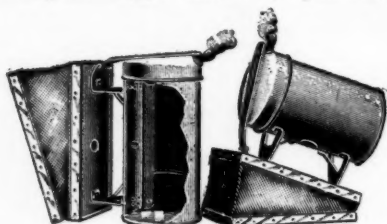
This is an illustrated pamphlet 6x8 1/2 inches, "explaining the keeping of bees successfully in upper rooms, house attics or lofts, whereby any one either in city or country is enabled with only a small expenditure of labor to get a good supply of honey without coming in contact with the bees, and without having the bees swarm out and leave, or being troubled from stings, as you work on one side of the wall and the bees on the other. This method also tells the commercial bee-keeper how he can divide his bees when he wishes to, instead of waiting and watching for them to swarm. It can all be done on the same day, or days if more than one apiary, as the time required for this operation is merely nominal, no swarms issue and go away. These methods are fully explained in this book, and how to care for the bees on the Pearce plan."

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Gold Medals, St. Louis, Exposition, 1904.  
Jamestown Centennial, 1907.



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The perpendicular **Fire-Draft Grate**, forcing air **both ways**, makes and cools the smoke, forming a **Double Fire-Wall** for **securely** riveting the **double-braced** brackets to the cup, that is **firmly bolted** to the valveless bellows by **Locked Nuts**.

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Fine Red Clover Italian Queens—they are hustlers. Try them. Every Queen a breeder. They are reared exclusively from A. I. Root's and J. M. Davis' stock.

Untested, 60c; Tested, \$1.00; Select Tested, \$1.25; Untested, per dozen, \$7.00.

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## Queens Ready Now!

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### Prices of 3 and 5-Band Queens.

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3	" Nuclei 1-fr. with Unt. Queen		1.75
3	" " 2-fr. " Test. " "		2.25
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Balance of season, 75c each. Safe arrival.

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**Wanted**—Old Combs and Slumgum. Will work it for half and pay 30 cents a pound for your share of wax. **A. A. LYONS,** 8A12t Rt. 5, Box 88, Ft. Collins, Colo.

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Queen-Breeder



Every Queen represents the highest Breed of Italian Bees. Golden, 5-Banded, and 3-Banded Queens from my Superior Strains, which are prolific, and hustlers for honey. No disease. Untested, \$1.00 each; \$5.50 for 6.

After July 1st, 75c each; \$4.00 for 6.

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Select Queens of either grade, 25c extra. Breeders, \$5.00 each.

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Queens reared last fall from our well-known strain of Italians, and every Queen guaranteed.

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These are very pretty things for bee-keepers or honey-sellers to wear on their coat-lapels. They often serve to introduce the subject of honey, which might frequently lead to a sale.

NOTE.—One bee-keeper writes: "I have every reason to believe that it would be a very good idea for every bee-keeper to wear one of these buttons, as it will cause people to ask questions about the busy bee, and many a conversation thus started will end up with the sale of more or less honey; at any rate it would give the bee-keeper a superior opportunity to enlighten many a person in regard to honey and bees."



The picture shown above is a reproduction of a motto queen-button that we offer to bee-keepers. It has a pin on the underside to fasten it.

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We manufacture Millions of **Sections** every year that are as good as the best. The **CHEAPEST** for the Quality; **BEST** for the Price. If you buy them once, you will buy again.

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CLEAN  
BEE SMOKER



Pat'd 1878, '88, '92 & 1903

Extracts from Catalogs—1907:

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All Bingham Smokers are stamped on the tin, "Patented 1878, 1892, and 1903," and have all the new improvements.

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Patented, May 20, 1879. **BEST ON EARTH.**

## Italian Queens by Return Mail.

Cyprians Carniolans, Caucasians and Bannats. Italians—Untested, 75c; Tested, \$1.25; Breeders, \$3.00. Others, 25c extra. Two 5-gallon cans, 50c; 1 gallon, \$8.25 per 100; 1 lb. panel and No. 25 bottles, \$3.75 a gross in crates; in boxes, 75c extra. Complete Alexander Hive, 9-F., 2-story, double cover, \$2.00; Alex. Veil, by mail, 45c. Gleanings or Bee-Keepers' Review, to new subscribers, 75c a year. Langstroth by mail \$1.00. Italian Bees, \$10.00 a colony, 8-F. with super. Supplies and Honey. Send for Catalog. Free School—Saturday afternoon classes.

**Walter C. Morris, 74 Cortlandt St., NEW YORK, N. Y.**

Apiary—Yonkers, N. Y.

Please mention Am. Bee Journal when writing.

## ITALIAN Queens Direct from ITALY

—Extensive Apiaries—

**E. PENNA, BOLOGNA, ITALY**

I send Queens from May 15 to Sept. 30. In Italy we have only Italian bees, so all my Queens are pure and rightly mated. One selected fertile Queen, 90c.; two Queens, \$1.60; six Queens, \$4.50; one Breeding Queen, \$2.00. Cash with orders. Queens postpaid. The safe arrival is NOT guaranteed.

Please mention Am. Bee Journal when writing.

## MOTT'S Strain of R. C. Italians

My 10-page Descriptive Price-List free. Untested, \$1.00 each; \$9.00 per doz. Natural Golden, from Imported Italian Stock, \$1.10 each; \$10 per doz. Reduced rates July 1st.

Nuclei and Bees by Pound.  
List to select from: Clubbing "The Pearce Method of Bee-Keeping" (price 50c) with a Guaranteed Queen, for \$1.10. Books by return; Queens after June 10th. Leaflets, "How to Introduce Queens," 15c each; also, "Increase," 15c each—or both for 25c. 3A7t

**E. E. Mott, Glenwood, Mich.**

Please mention Am. Bee Journal when writing.

Cannot Surpass Them!

## Famous Golden & Red Clover

Queens. Untested, 50 cts.; Select Untested, 75c; Tested, \$1.00.

NUCLEI, \$1.00 per Frame.

**Evansville Bee & Honey Co.,**

5A3t EVANSVILLE, IND.

Please mention Am. Bee Journal when writing.

## Southern Bee-keepers!

When your HONEY is ready for market, write us. Will buy outright, or handle on commission. Send samples with full particulars.

—:—:—

We are paying 30c per pound, net, f. o. b. New York for Choice Yellow

⊙ **Beeswax** ⊙

**HILDRETH & SEGELKEN,**

265-267 Greenwich St.,

**NEW YORK, N. Y.**

Please mention Am. Bee Journal when writing.

## Sweet Clover Seed!

Sweet Clover is rapidly becoming one of the most useful things that can be grown on the farm. Its value as a honey-plant is well known to bee-keepers, but its worth as a forage-plant and also as an enricher of the soil are not so widely known. However, Sweet Clover is coming to the front very fast these days. Some years ago it was considered as a weed by those who knew no better. The former attitude of the enlightened farmer today is changing to a great respect for and appreciation of Sweet Clover, both as a food for stock and as a valuable fertilizer for poor and worn out soils.

The seed can be sown any time. From 18 to 20 pounds per acre of the unhulled seed is about the right quantity to sow.

We can ship promptly at the following prices for the white variety:

Postpaid, 1 pound for 30 cents, or 2 pounds for 50 cents. By express f. o. b. Chicago—5 pounds for 75c; 10 pounds for \$1.40; 25 pounds for \$3.25; 50 pounds for \$6.00; or 100 pounds for \$11.50.

If wanted by freight, it will be necessary to add 25 cents more for cartage to the above prices on each order.

**George W. York & Company,**

117 N. Jefferson St., CHICAGO, ILL.

Please mention Am. Bee Journal when writing.

## TEXAS HEADQUARTERS

Root's Supplies for Bee-Keepers.

Makers of Weed New Process Comb Foundation.

Buy Honey and Beeswax.

Catalogs Free.

**Toepperwein & Mayfield Co.**

Cor. Nolan & Cherry Sts.,

4A7f **San Antonio, Texas.**

Please mention Am. Bee Journal when writing.

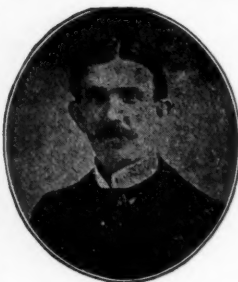
## FOR SALE

Untested Golden Italian Queens 50 cts. each

6A3 **J. F. Michael, Rt. 1, Winchester, Ind.**

Please mention Am. Bee Journal when writing.

# American Bee Journal



"If goods are wanted quick, send to Pouder"  
(Established 1889)

## BEE-SUPPLIES

Standard hives with latest improvement; Danzenbaker Hives, Sections, Comb Foundation, Extractors, Smokers—in fact, everything used about the bees. My equipment, my stock of goods, the quality of my goods, and my shipping facilities, can not be excelled.

### Paper Honey-Bottles

for Extracted Honey. Made of heavy paper and paraffin coated, with tight seal. Every honey-producer will be interested. A descriptive circular free.

Finest **White Clover Honey** on hand at all times.  
I buy **Beeswax**. Catalog of supplies free.

Watter S. Pouder, Indianapolis, Ind.

859 Massachusetts Ave.

## BETTER FRUIT

The best fruit growers' illustrated monthly published in the world. Devoted exclusively to modern and progressive fruit growing and marketing. Northwestern methods get fancy prices, and growers net \$200 to \$1000 per acre. One Dollar per year. Sample copies free.

**Better Fruit Publishing Co.** HOOD RIVER, OREGON.

**Poultry Profits Doubled**

**CAPONS** bring the largest profits — 100% more than other poultry. Caponizing is easy and soon learned. Capons sell for 30c. a pound, while ordinary poultry brings only 15c. a pound. Progressive poultrymen know these things and use

**PILLING CAPONIZING SETS**  
Sent postpaid, \$2.50 per set with "Easy-to-use" instructions. We also make **Poultry Marker, 25c. Gape Worm Extractor, 25c. French Killing Knife, 50c.** Booklet, "Guide for Caponizing," FREE.

**G. P. PILLING & SON CO., 23d & Arch Sts., Philadelphia, Pa.**

## NEW ENGLAND BEE-KEEPERS

Everything in Supplies.  
New Goods. Factory Prices.  
Save Freight & Express Charges.

**Cull & Williams Co.**  
4Atf PROVIDENCE, R. I.

## The Swarthmore Apiaries

are now shipping their well-known

## PEDIGREED GOLDEN QUEENS

The Swarthmore Apiaries,

6A4 Swarthmore, Pennsylvania.

# Root Section Honey-Boxes

Concerning the importance of buying the best, and our ability to furnish sections of a superior quality to bee-keepers everywhere.

## Our Section Making Department

we believe to be the best equipped in the world. We claim superiority of workmanship in several respects, especially in smoothness of the dovetailing and the ends of the sections. They are polished on both sides in double-surface sanding machines, and are therefore uniform in thickness. Too much importance can not be attached to putting up comb honey in sections of uniform quality, and experienced honey-producers agree that **ROOT SECTIONS** of either A or B grades are a most essential investment.

### Price-List of Sections

**Root Sections** come in several standard styles and sizes—with or without bee-way as follows:

**4 1/4 x 4 1/4 BEEWAY SECTIONS.**  
2 inch, 1 15-16, 1 1/4, or 7-to-foot wide.

We send 1 1/2 style 2 beeway when your order does not specify style or width wanted.

Quan.	Grade A	Grade B
100	\$ 80	\$ 70
250	1 60	1 40
500	2 75	2 50
1000	5 50	5 00

**PLAIN, OR NO-BEEWAY SECTIONS.**  
4 1/4 x 4 1/4 x 1 1/2, 1 3/8, or 1 3/4; 4 x 5 x 1 3/8 or 1 1/2; or 3 1/2 x 5 x 1 1/2.

We send 4 1/4 x 1 1/2 plain, or what will fit other items in your order, if you do not specify.

Quan.	Grade A	Grade B
100	\$ 80	\$ 70
250	1 60	1 40
500	2 75	2 50
1000	5 25	4 75

One hundred sections weigh about 7 lbs.

**Better Order** a supply of **Root's Weed Process Foundation** with your sections. 1910 sales on this very superior product totaled nearly 200,000 lbs. Samples with full information and prices may be had upon request.

**Remember**—We carry complete stocks at this branch and guarantee quick delivery on sections in lots of 100 to 1,000,000, and on foundation and other supplies in any quantity. You ought to know the complete **ROOT LINE** for every appliance for successful bee-keeping. Get the new catalog—brimful of the most modern supplies priced at rock bottom figures for goods of the quality we have manufactured for more than 40 years.

**THE A. I. ROOT CO., 213 Institute Place, CHICAGO, ILL.**

R. W. BOYDEN, Mgr.

(JEFFREY BUILDING)

Telephone 1484 North.



# American Bee Journal

## "How to Keep Bees," BY A. Botsford Comstock.

A simple book, written in a clear, every-day language, is much to be preferred, even if it does not treat of quite so many little details, which interest only the professional bee-keeper. Such is "How to Keep Bees," written by a gifted author, who made a start in bee-keeping three different times, thus being afforded the opportunity of personally finding out the difficulties and trials that beset the beginner with bees. It is a book written by an amateur to amateurs, so eminently readable, that any one interested in the subject can sit down and devour it clear through, as though it were a modern novel. The print is large, and typographically as well as rhetorically, it is the peer of any such book now on the market. It is bound in cloth, and contains 228 pages.

There are 20 chapters in the book as follows:

- |   |   |
|---|---|
| 1. Why Keep Bees?                             | 11. Points About Beeswax.                 |
| 2. How to Begin Bee-Keeping.                  | 12. Feeding Bees.                         |
| 3. The Location and Arrangement of the Apiary | 13. How to Winter Bees.                   |
| 4. The Inhabitants of the Hive.               | 14. Rearing and Introducing Queens.       |
| 5. The Industries of the Hive.                | 15. Robbing in the Apiary.                |
| 6. The Swarming of Bees.                      | 16. The Enemies and Diseases of Bees.     |
| 7. How to Keep from Keeping Too Many Bees.    | 17. The Anatomy of the Honey-Bee.         |
| 8. The Hive and How to Handle It.             | 18. The Interrelation of Bees and Plants. |
| 9. Details Concerning Honey.                  | 19. Bee-Keepers and Bee-Keeping.          |
| 10. Extracted Honey.                          | 20. Bee-Hunting.                          |

There is also a bibliography and index. From a beginner's standpoint it is a complete treatise on bees, and we can not do better than recommend it. In fact, it should find a place in every bee-keeper's library.

### Our Offers of this Interesting Book.

We mail this book for \$1.10; or we club it with the American Bee Journal one year—both for \$1.75; or, we will mail it free as a premium for sending us 3 new subscriptions to the American Bee Journal for one year with \$3.00 to pay for the subscriptions. Address,

**GEORGE W. YORK & CO., 117 No. Jefferson St., CHICAGO, ILL.**

## Comb Foundation BEE - KEEPERS' SUPPLIES

It is made on new improved machines, and the Bees take to it more readily than any other Comb Foundation on the market.

Dittmer makes a Specialty of  
**Working Your Wax into Comb Foundation for You.**

Our Wax Circular and Bee-Supply Price-List Free upon application.

Write us your wants—it is no trouble to us to answer letters.

**Gus Dittmer Company, - Augusta, Wisconsin.**

## STANLEY is to the Front with BEES and QUEENS

**32 Years a Queen-Breeder. My Specialty is Choice Breeding Queens.**

Choice Breeding Queens, Golden, each, \$3.00; 3-Banded Italians, \$2.00.  
Golden and 3-Banded Tested, each, \$1.25; dozen, \$10.00.  
Carniolan, Caucasian, and Banats, each, \$1.25; dozen, \$10.00.  
Warranted Queens of the above Races, each, 75 cts.; dozen, \$7.00.  
Virgin Queens of the above Strains, 25 cts. each.

These Queens are sent in a Stanley Improved Introducing Cage. These Cages are well worth what I ask for Queen and Cage.

**Arthur Stanley, Dixon, Lee Co., Ill.**

## LEWIS BEEWARE — Shipped Promptly

**ARND HONEY & BEE-SUPPLY CO. NOT INC.**

(Successors to the York Honey & Bee-Supply Co.)

**148 West Superior St., CHICAGO, ILL.**

Send for Catalog.

Enough said!

## QUEENS

### Bees by the Pound and Full Colonies

Hardy Golden and Three-banded Italians. Hustlers for honey, and are gentle. No disease.  
Untested queens, \$1.00 each, \$5.00 for six; tested, \$1.50 each, \$8.00 for six; select tested, \$2.00. One-frame nucleus, \$2.00; two-frame, \$3.00; three-frame, \$4.25; ½ lb. bees, \$1.75 (add price of queen wanted); full colonies, \$7.00.

### VIRGIL SIREs,

**516 North 8th St.,  
NORTH YAKIMA, WASH.**

Please mention Am. Bee Journal when writing.

## Bee-Supplies

We are Western Agents for—

### "Falconer"

— Write for Catalog

**C. C. Clemons Bee-Supply Co.**

**128 Grand Ave., Kansas City, Mo.**

Please mention Am. Bee Journal when writing.

## Mexico as a Bee-Country

B. A. Hadsell, of Buckeye, Arizona—one of the largest bee-keepers in the world—has made six trips to Mexico, investigating that country as a bee-country, and is so infatuated with it that he is closing out his bees in Arizona. He has been to great expense in getting up a finely illustrated 32-page booklet, describing the tropics of Mexico as a Bee-Man's Paradise, which is also superior as a farming, stock-raising and fruit country. Where mercury ranges between 55 and 93. Frost and sun-stroke is unknown. Also a great health resort. He will mail this book by addressing,

**B. A. Hadsell, Lititz, Pa.**

Please mention Am. Bee Journal when writing.

## Increase Your Honey Crop



By introducing some of OUR

**Famous Honey-Queens.** Some of our Colonies produced 250 lbs. of Surplus Honey the past season. No better bees in the World.

Will sell Queens the following prices, May to Nov.:

Untested Queen, \$1.00; 6 for \$5.50. Tested, \$1.50; 6 for \$8.50. BREEDERS, \$5.00 to \$10.00 each, 25 years' experience in Queen-Rearing.

**Fred Leininger & Son,**

2Atf

**DELPHOS, OHIO.**

## Superior Golden Queens Standard Breed

That have a record of 250 pounds of honey per colony. Gentle to handle, and Beautiful in Color; as hardy as any Strain or Race of Bees, and almost Non-Swarming. We handle them without gloves or veil, and but little smoke.

Untested, \$1.25; 6 for \$6.00; 12 for \$10.00.

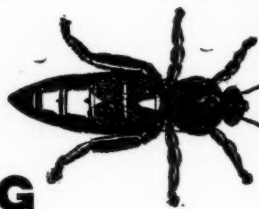
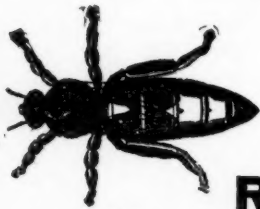
No disease.

If you want to know more about them, write us. All tested Queens sold until in June, then we will have them.

**T. S. HALL,**

**Talking Rock, Pickens Co., Ga.**

# American Bee Journal



## REQUEENING with Standard-Bred Italian Queens.

The demand for our Fine Standard-Bred Untested Italian Queen is increasing rapidly, because **they give satisfaction.** Here is what two of many pleased customers have to say;

GEORGE W. YORK & CO.—

I must tell you how well pleased I am with the Queen you sent me last year. I thought I had some pretty good Queens myself, but the one you sent me is the best Queen I have now. You know we have had, and are still having, a severe drouth. White clover lasted only two weeks, and while my average of honey per colony is about 40 pounds of surplus, the bees from the Queen you sent me have gathered, so far, more than 100 pounds of fine honey. They are hustlers, indeed, and the bees are very gentle. **Twenty dollars would not buy that Queen.** After this I know where I will get my Queens.

G. A. BARBISCH.

Houston Co., Minn., July 14, 1910.

GEORGE W. YORK & CO.—

I have had a good many Queens from you in the past, and have never gotten a poor one. (REV.) MILTON MAHIN.  
New Castle, Ind., July 18, 1910.

We could publish many more testimonials like the above, but what would be the use? As "the proof of the pudding is in the eating" thereof, so the proof of the value of our good Queens is in getting and trying them yourself. Send in your order at once and see the nice, vigorous Queens you will get. Some of the largest honey-producers in this country use our Queens. They know what they want, and where to get it. That is the reason they order our Queens.

If you have not had any of our Standard-Bred Queens, why not get one of them **now** with a renewal of your subscription to the American Bee Journal? No matter if your subscription is now paid in advance, we will credit it still another year, and also send you the Queen. **Prices after July 15th:**

We mail one Queen with the Bee Journal for a year—both for only \$1.50. Queen alone is 75 cents; 3 for \$2.10; 6 for \$4.00; 12 for \$7.50. These prices are exceedingly low in view of the excellence of the Queens. It pays to get **good stock.** Mr. Barbisch as well as thousands of others have proven this.

Now is the time to requeen your colonies. Why not order some of our good Queens?

We are now sending Queens **almost by return mail**, and expect to continue to do this until the end of the season. Address all orders to—

**GEORGE W. YORK & CO.,**

117 N. Jefferson St., Chicago, Ills.



## J. E. Hand

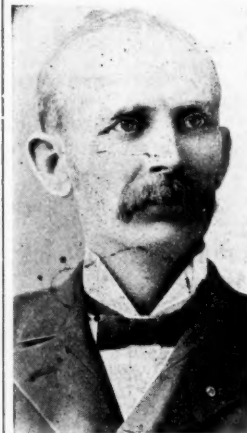
The Veteran Queen-Specialist

WILL begin the season of 1911 with greatly improved facilities for rearing the choicest queens.

Our queens are not only large, vigorous, handsome, and prolific, but by reason of a judicious system of line breeding they have the power to transmit inherent tendencies of a highly desirable nature, such as hardiness, gentleness, and industry, as well as uniformity of marking, which makes them especially valuable as breeders. Every queen is warranted to produce uniformly marked bees of superior honey-gathering qualities. Don't take chances. Get the real thing. Warranted, \$1.00; six, \$5.00; dozen, \$9.00. Tested, \$1.25. Breeders, \$5.00. Half pound of bees, no queen, \$1.00. Three (L.) frame nucleus, no queen, \$3.25. No selection, therefore no culls, and a square deal for all. Valuable information free for your address.

**J. E. HAND,**

**Birmingham, Ohio**



## This Man

Will consider it a privilege if you will let him make you an estimate on a bill of goods. Send him a list of what you want, and he will quote prices with discounts.

Goods can be shipped from Fremont, Mich., CHICAGO, ILL., or Medina, Ohio—whichever place

will cost the less freight; or you can have the estimate to be delivered at your station, freight prepaid.

He has the largest and most complete stock in his 25 years as a supply-dealer, and can ship promptly

**All Root's Goods at their Prices, with Season's Discount.**

BEES, QUEEN'S, and Three-Frame Nuclei a specialty; Hilton's Superior Strain. (See testimonials.)

BEESWAX wanted for Cash or Exchange

Send for 50-page Catalog to—

6A3

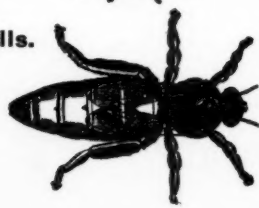
**George E. Hilton, Fremont, Mich.**

Please mention Am. Bee Journal when writing.

## QUEENS Scoggins - Noted - Strain

Accidentally discovered the greatest honey-gatherers known. Cross of Cyprians and Italians. Thoroughly tested 8 years for honey. If it's honey you want, buy these Queens. Price, \$1 to \$5, for introduction. Only few extra-fine Breeders for sale. 5A3t

**J. B. SCOGGINS, FOUKE, ARK**





## HONEY AND BEESWAX~

CHICAGO, July 1.—There has been an absence of comb honey during the past month (with the exception of some undesirable lots) on the market, hence no sales to base quotations upon. Extracted—although the offerings have been free, few sales are made, buyers feeling prices are at too high figures. This month will decide the output for the Middle and Eastern States for the year of 1911, thus enabling dealers and producers to arrive at fair estimate of values. Beeswax is in good demand at 30¢@32¢.

R. A. BURNETT & Co.

INDIANAPOLIS, July 1.—The demand for best grades of white clover comb and extracted honey is excellent. Fancy white comb is being offered at 17¢ by the case. No. 1 white comb at 15¢. Extracted, in 5-gallon cans, at 11¢ per pound. Some slight reductions on quantity lots. It is presumed that producers are being paid about 2 cents less than above quotations. Producers of beeswax are being paid 20¢ cash, or 31¢ in trade.

WALTER S. POWDER.

NEW YORK, July 3.—We have nothing to report on comb honey. Fancy white and No. 1 are pretty well cleaned up. Some little demand at from 14¢@15¢. Off grades, mixed and buckwheat, are not wanted, and some of these will have to be carried over. Extracted is in good demand. New Southern stock is arriving quite freely, and selling at from 65¢@85¢ per gallon, according to quality. There is no new crop from California on the market as yet, and we do not expect to have any for another month to come. Beeswax, quiet at 30¢ per lb.

HILDRETH & SEGELKEN.

CINCINNATI, July 1.—The market is bare of comb honey. There is as yet no new to offer, and it will be hard to tell just what it will bring. We are selling water-white extracted honey, put up in 60-lb. cans, 10¢. There is no new white clover extracted honey as yet to hand. Amber honey in barrels is selling at 7¢. Beeswax is in fair demand at 33¢ per 100 lbs. These are our selling prices, not what we are paying.

C. H. W. WEBER & Co.

CINCINNATI, July 3.—Extracted honey is moving quite lively. For amber honey we are getting from 6¢@7¢, according to the quality; for fancy table honey from 8¢@10¢ in boxes of two 60-lb. cans. We have already received a number of shipments of comb honey, which found ready sale at 16¢@17¢ a pound in 24-section cases. The above are our selling prices, and we must buy at even better prices than these. For choice, bright yellow wax, free from dirt, we are paying from 20¢@30¢ a pound cash.

THE FRED W. MUTH Co.

BOSTON, July 3.—Fancy and No. 1 white comb honey, 15¢@16¢. White extracted, 12¢. Beeswax, 30¢.

BLAKE-LEE Co.

KANSAS CITY, MO., July 5.—A few shipments of new comb honey have arrived on our market; there is no new extracted here as yet. We quote: No. 1 white comb, 24-section cases, \$3.50; No. 2, \$3.25. White extracted, old, per lb., 8¢. Beeswax, 25¢@30¢.

C. C. CLEMENS PRODUCE Co.

Please mention Bee Journal to advertisers

## Extra-Good Queens!

So sure am I that my Leather-Colored Italian Queens are Extra-Good, that I will guarantee them to please you, or return your money.

"S. F. TREGO:—I am very much pleased with your Queens, and you may expect more orders next season. Your Queens are the best I ever bought from any breeder in the U. S.—A. R. BRUNSKILL, Canada."

One, 90¢; six, \$4.75; doz. \$9.00.

After July 1st, 70¢; six, \$3.75; doz. \$6.50; 20 or more, 50¢ each.

No disease. Prompt shipment. 3A7t

**S. F. Trego, Swedona, Ill.**

Please mention Am. Bee Journal when writing.

## "Langstroth on the Honey-Bee"

This is one of the standard books on bees. It tells in a simple, concise manner just how to keep bees. It was originally written by Rev. L. L. Langstroth, who invented the movable-frame hive in 1851. The book has been brought right down to date by Dadant & Sons, than who there are no better or more practical bee-keepers in this or any other country. It contains nearly 600 pages, is fully illustrated, and is bound in cloth. Every topic is clearly and thoroughly explained, so that by following its instructions no one should fail to be successful with bees. Price, postpaid, \$1.20; or with the American Bee Journal one year—both for \$2.00. Send all orders to the American Bee Journal.

# All Roads Lead to Cincinnati

"Deal with Weber & Co. at the Service Center"

The supplies you have on hand are worth many times as much to you as those you must order and wait for when the honey-flow is on. We know how busy you are in making final preparations for the big year we all expect; but try not to overlook the importance of getting your orders for sections, foundation, extra hives, supers, etc., in RIGHT NOW. You will be pleased with our QUICK DELIVERIES and with the quality, and we will give your order our best possible attention, no matter when it comes; but we urge you to get in a good stock of sections and foundation NOW. Let us tell you about these goods.

## SECTIONS

We handle the best grade of sections made. If you want a hundred or ten thousand, or a hundred thousand, we can fill your order promptly with goods we will guarantee to please. You may judge of the popularity of the sections we sell when we tell you that the manufacturers make upward of twenty-five million of them every season.

## FOUNDATION

There is nothing more important to the up-to-date bee-keeper than to have foundation just when he needs it, and of the best quality. We sell nothing but Root's Weed-process Foundation, the recognized standard of the world. The bees appreciate the good points of this foundation, and every bee-keeper knows that it is the best. All grades and sizes constantly on hand. A pound or a ton, just as you like.

There are other items of interest too numerous to mention. We can furnish anything you need in the bee-keepers' supply line, and get it to you so promptly that the goods will reach you just when you need them most. No order is too small for our attention, and none so large that we can not handle it to your satisfaction. Send US your hurry orders and allow us to demonstrate what we can do for you. Catalog on request.

## Poultry Supplies

A special catalog of these Goods, which we will gladly furnish free upon request.

**C. H. W. Weber & Co., 2146 Central Ave., Cincinnati, Ohio.**

Where the Special Car of Bee-Keepers will leave Aug. 29 for the Minneapolis Meeting.



New Passenger Terminal of the Chicago & North-Western Railway, Chicago, Ill.

## FAMOUS "falcon" Goods

Conveniently Located in Chicago.

It is fitting that "falcon" goods, the world's best bee-keepers' supplies, should be sold in locations most conveniently situated for its patrons. Particularly is this true in Chicago. The North-Western Station pictured above is just one-half block from our warehouse. With the moving of this terminal from its former location north of the river, the "falcon" House is **the only house conveniently located to any of the Depots**. We are located not only in immediate conjunction with the North-Western, but also with the Union Depot, and **all** other Railway Stations are within short walking distances. The Elevated cars span the North-Western Station, and the Madison Street surface cars tunnel it, connecting us with every portion of the **City**.

Truly our location is ideal for bee-keepers in the Chicago territory.

Our location in the heart of the railroad district gives us pre-eminent facilities for prompt shipment. Send us your **Rush** orders for Sections and Foundation.

### **Shipping-Cases : --**

Have you our descriptive circular giving prices on Shipping-Cases. We will be pleased to mail it to you, together with our complete Catalog of everything needed by the bee-keeper.

---

## W. T. FALCONER MFG. CO.

The Only Bee-Supply House in the Business Section of Chicago,

117 N. Jefferson St., CHICAGO, ILL.

Factory : FALCONER, N. Y.



